

## **Appendix C2 Coordination Letters**

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408

# ARKANSAS ARCHEOLOGICAL SURVEY

Sponsored Research Program, 2475 N. Hatch, Fayetteville, AR 72704, Phone: (501) 575-6560, Fax: (501) 575-5453

April 20, 2000

Ms. Kelly Maddoux  
Barnard Dunkelburg & Company  
Cherry Street Building  
1616 East Fifteenth St.  
Tulsa, OK 74120

APR 24 2000

RE: NWRA Intermodal Access Road EIS

Dear Ms. Maddoux,

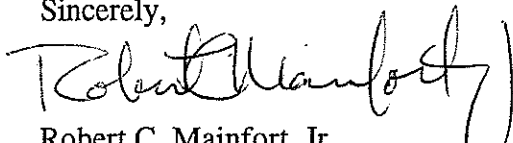
Per your letter of April 11, below is a general statement regarding the potential cultural resources that may be located within the study area. I will preface my remarks by noting that although there are relatively few archeological sites presently recorded within the study area, this reflects the very limited extent of investigations in the study area rather than an actual lack of archeological sites. In fact, there is high potential for archeological sites within the study area.

In a general sense, the names of modern communities within the study area, such as Cave Springs and Healing Springs, suggest the high potential for both prehistoric Native American, as well as historic Euroamerican archeological sites. Numerous springs are identified within the study area on the relevant USGS quadrangle maps. This concentration of springs undoubtedly attracted considerable numbers of prehistoric and historic people, as did Osage Creek and its tributaries. There is a relatively high probability that wherever the proposed alternatives cross a stream or are in close proximity to a spring, archeological resources will be present, although this does not mean that sites do not occur away from water.

The Arkansas Ozarks have been inhabited for over 10,000 years, and based on recent archeological studies within this region, it is likely that the entire span of human occupation is represented within the study area. Several fairly large prehistoric archeological sites have been recorded within the area, and local informants have reported other sites that have not yet been visited by the Arkansas Archeological Survey. Moreover, there is probably a fairly rich historic archeological record (including cemeteries) within the study area. The portion of the Ozarks within the study area attracted early nineteenth century Euroamerican settlers, and communities such as Healing Springs were more populous in the late nineteenth and early twentieth centuries than they are today. Many former buildings are now represented only as archeological sites.

I hope that the above is what you had in mind. If not, please let me know.

Sincerely,



Robert C. Mainfort, Jr.  
Sponsored Research Administrator



The Department of  
**Arkansas  
Heritage**

Mike Huckabee, Governor  
Cathie Matthews, Director

Arkansas Arts Council

Arkansas Historic  
Preservation Program

Arkansas Territorial Restoration

Delta Cultural Center

Old State House Museum



**Arkansas Natural  
Heritage Commission**

1500 Tower Building  
323 Center Street  
Little Rock, AR 72201  
(501) 324-9619

fax: (501) 324-9618

tdd: (501) 324-9811

e-mail: [info@dah.state.ar.us](mailto:info@dah.state.ar.us)

website:

[www.heritage.state.ar.us/nhc/](http://www.heritage.state.ar.us/nhc/)

An Equal Opportunity Employer



408  
**RECEIVED**

MAR 31 2000

**Barnard Dunkelberg**

Date: March 28, 2000

Subject: Elements of Special Concern

Northwest Arkansas Regional Airport Access

AHTD #090069, FAP HPP-0238(1)

ANHC No.: P-CF..-00-010

Ms. Kelly Maddoux  
Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, OK 74120-6027

Dear Ms. Maddoux:

This responds to your letter of January 26, 2000 inviting comments on the proposed Northwest Arkansas Regional Airport Access. The Federal Highway Administration, in cooperation with the Arkansas State Highway & Transportation Department, and the Northwest Arkansas Regional Airport Authority, proposes to construct a new intermodal access toll road from either U.S. 71 or U.S. 412 to the Northwest Arkansas Regional Airport. Your company, in association with CH2M Hill is preparing the Environmental Impact Statement for the project. The Arkansas Natural Heritage Commission is aware of sensitive resources within the airport study area.

Seven species of special concern have been recorded within the boundaries of the study area: Ozark least trillium (Trillium pusillum var. ozarkanum), ringed salamander (Ambystoma annulatum), Arkansas darter (Etheostoma cragini), least darter (Etheostoma microperca), Ozark cave amphipod (Stygobromus ozarkensis), Ozark cavefish (Amblyopsis rosae), and gray bat (Myotis grisescens). The enclosed map depicts generalized locations for these species. Ozark least trillium, ringed salamander, Ozark cave amphipod, and least darter are species of state concern. Arkansas darter, Ozark cavefish and gray bat are species of federal concern. Arkansas darter is currently a candidate for possible listing by the U.S. Fish and Wildlife Service (USFWS). Ozark cavefish is listed as Threatened and gray bat is listed as Endangered by the USFWS. Project design should seek to avoid and minimize adverse impacts to these sensitive species.

Of greatest concern to this agency are potential project impacts to the Little Osage Creek system and to cave species. A spring run tributary to Little Osage Creek is known to support both Arkansas and least darters. This area

has been designated as an Ecologically Sensitive Waterbody under the Arkansas Department of Environmental Quality's Regulation No. 2. Efforts should be made to avoid adverse impacts to this stream system. The Ozark cavefish has been recorded from one site within the study area and several sites just outside the study boundaries. The underground connection of these occurrences is not well understood. Project design should take into consideration the karst topography and the potential to impact sensitive cave resources. It would be appropriate to include persons knowledgeable in cave biota and geohydrology as part of the team developing project alternatives, and monitoring road construction.

Cave Springs Cave Natural Area falls within the study boundaries. This area is owned and managed by the Arkansas Natural Heritage Commission to protect its sensitive resources. A map showing the approximate boundaries of the Natural Area is enclosed for your reference. Adverse impacts to the Natural Area should be avoided.

The opportunity to comment is appreciated.

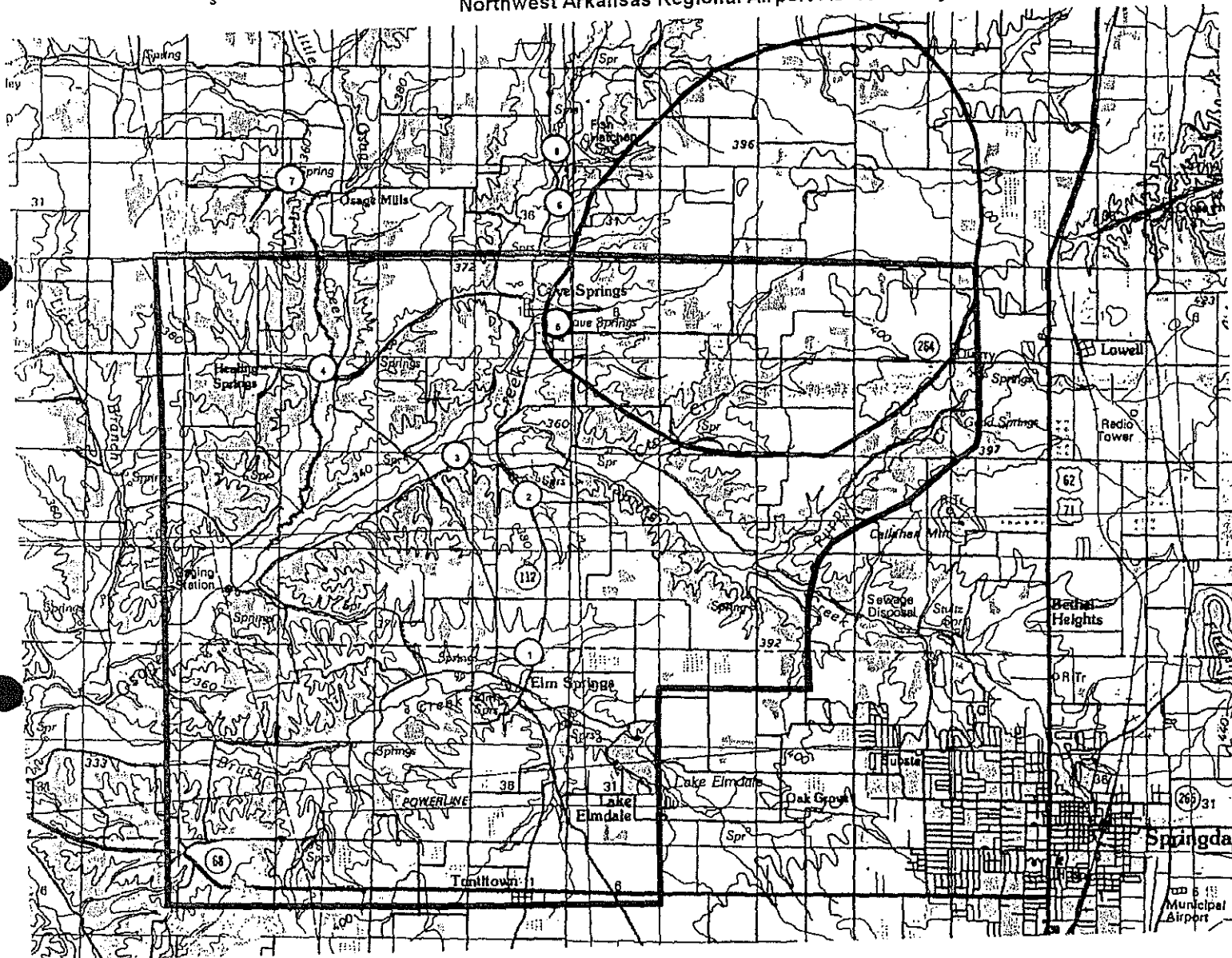
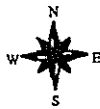
Sincerely,

A handwritten signature in cursive script that reads "Cindy Osborne".

Cindy Osborne  
Data Manager

Enclosures: Map, Elements of Special Concern  
Map, Cave Springs Cave Natural Area

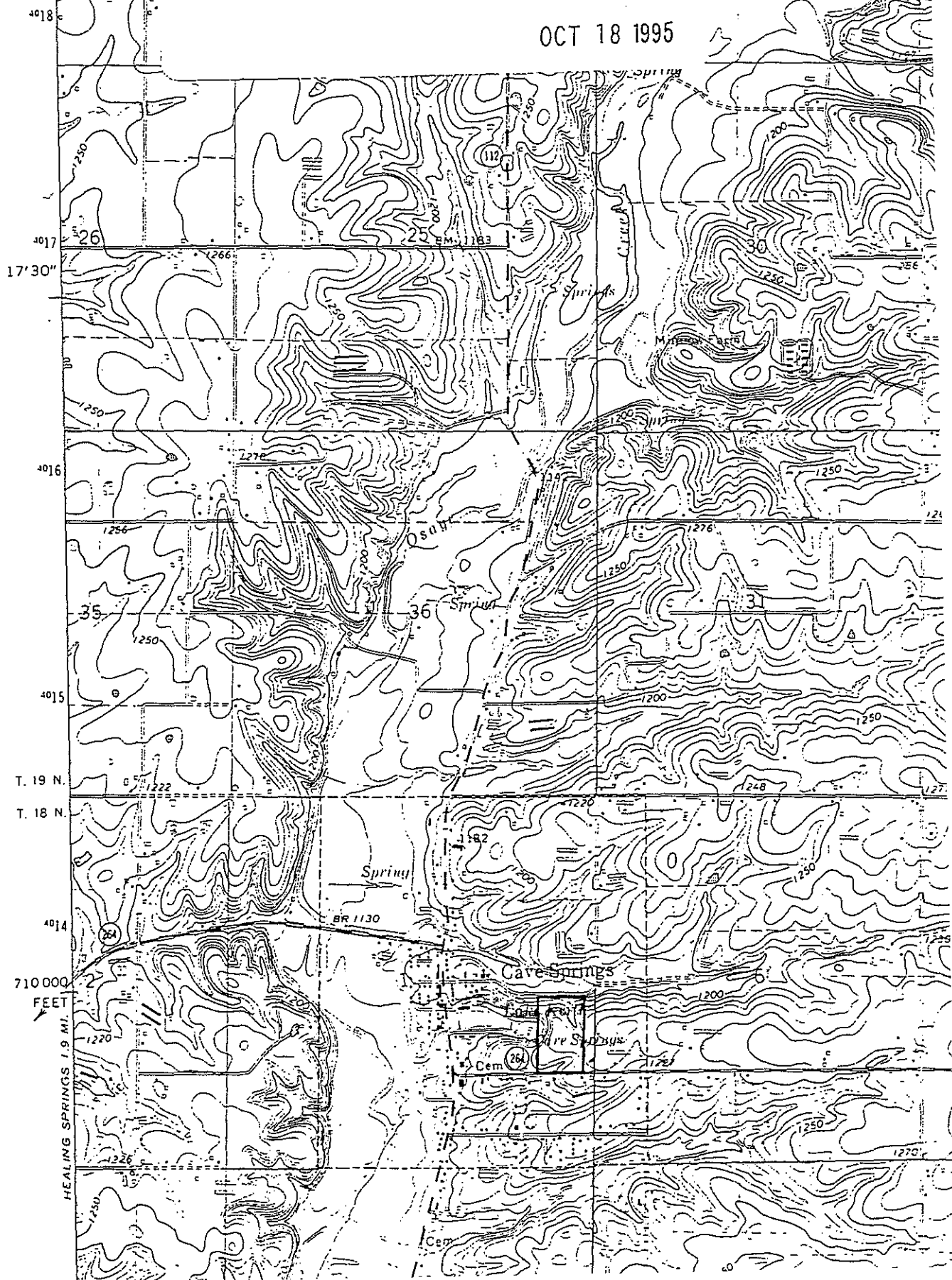
Arkansas Natural Heritage Commission  
 Department of Arkansas Heritage  
 Inventory Research Program  
 Elements of Special Concern  
 Northwest Arkansas Regional Airport Access Study Area



- Approx. boundaries of Cave Springs Cave Recharge Area
- Elements of Special Concern
- Ecologically Sensitive Waterbody (ADEQ, Reg. 2)
- Airport Road Study Area

1. *TRILLIUM PUSILLUM* VAR. *OZARKANUM*  
 OZARK LEAST TRILLIUM  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 019
2. *AMBYSTOMA ANTHRALIUM*  
 RINGED SALAMANDER  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 021
3. *TRILLIUM PUSILLUM* VAR. *OZARKANUM*  
 OZARK LEAST TRILLIUM  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 017
4. *ETHIOSTOMA CRAGNI*  
 ARKANSAS DARTER  
 STATUS: FEDERAL CONCERN ELEMENT  
 (CANDIDATE SPECIES)  
 ANHC NO.: 002
4. *ETHIOSTOMA MICROPERCA*  
 LEAST DARTER  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 004
4. HIGH QUALITY EXAMPLE OF  
 SPRING-OZARK MOUNTAINS  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 001
5. CAVE SPRINGS CAVE NATURAL AREA  
 OWNED BY THE ARKANSAS NATURAL  
 HERITAGE COMMISSION
6. *STYLOPORHUS OZARKENSIS*  
 OZARK CAVE AMPHIPOD  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 001
5. HIGH QUALITY EXAMPLE OF  
 CAVE STREAM  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 001
5. *AMBLYOPSIS ROSAE*  
 OZARK CAVEFISH  
 STATUS: FEDERAL CONCERN SPECIES  
 (LISTED THREATENED)  
 ANHC NO.: 002
5. *MYOTIS DISSESCENS*  
 GRAY MYOTIS  
 STATUS: FEDERAL CONCERN SPECIES  
 (LISTED ENDANGERED)  
 ANHC NO.: 003
5. *AMBLYOPSIS ROSAE*  
 OZARK CAVEFISH  
 STATUS: FEDERAL CONCERN SPECIES  
 (LISTED THREATENED)  
 ANHC NO.: 004
7. *EURYCEA TYNERENSIS*  
 OKLAHOMA SALAMANDER  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 011
7. *AMBLYOPSIS ROSAE*  
 OZARK CAVEFISH  
 STATUS: FEDERAL CONCERN SPECIES  
 (LISTED THREATENED)  
 ANHC NO.: 010
8. *ETHIOSTOMA MICROPERCA*  
 LEAST DARTER  
 STATUS: STATE CONCERN ELEMENT  
 ANHC NO.: 001

County(s): Benton  
Quad. Name: Bentonville South 7.5  
Township/Range/Section: T18N/R31W/S1



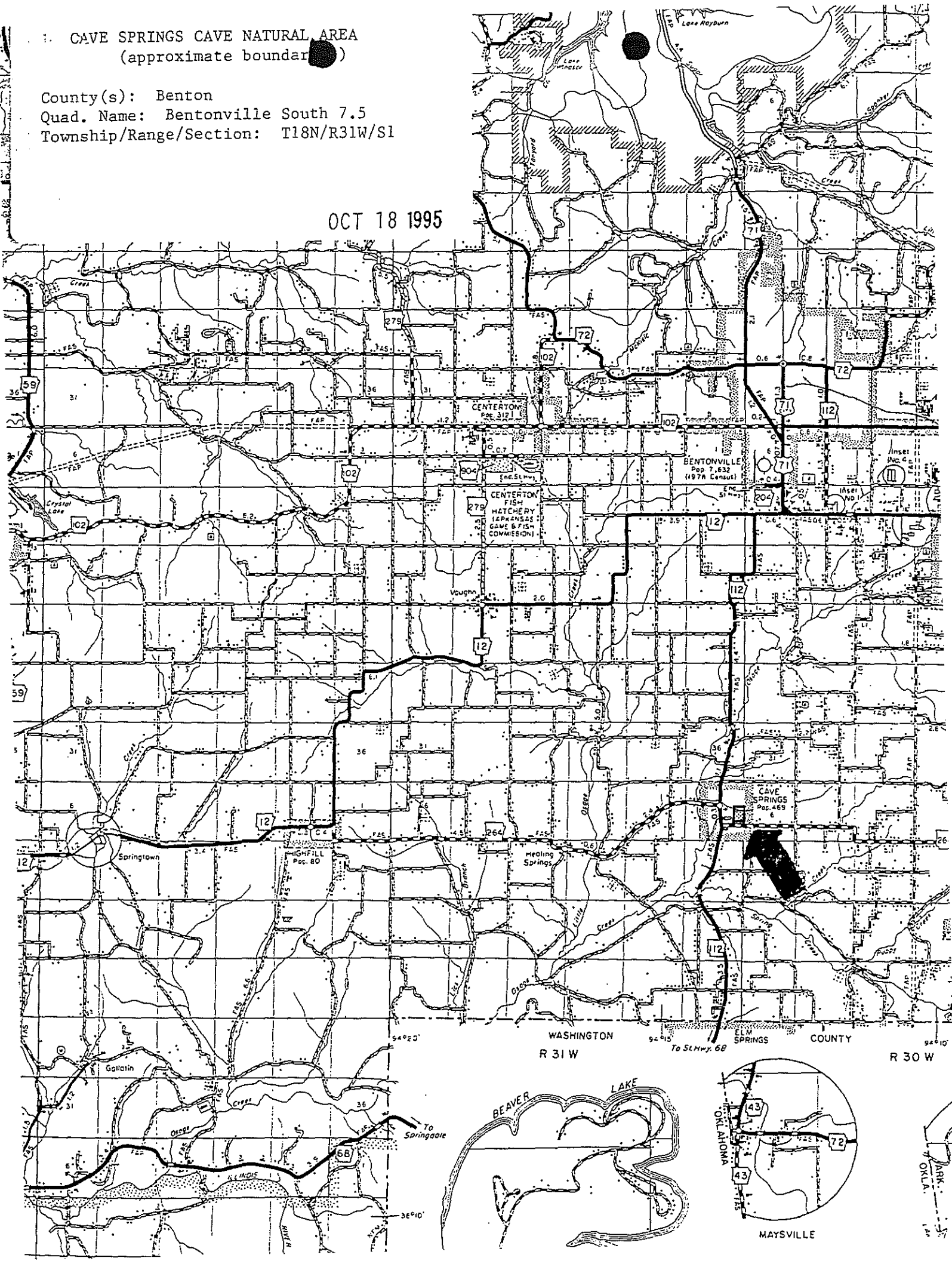
CAVE SPRINGS CAVE NATURAL AREA  
(approximate boundary)

County(s): Benton

Quad. Name: Bentonville South 7.5

Township/Range/Section: T18N/R31W/S1

OCT 18 1995





**DEPARTMENT OF  
PARKS & TOURISM**

One Capitol Mall  
Little Rock, AR 72201  
Phone: 501-682-7777  
FAX: 501-682-1364  
History Commission  
501-682-6900 (V/TT)  
Keep Arkansas  
Beautiful Division  
501-682-3507  
Personnel Section  
501-682-7742 (V/TT)  
State Parks Division  
501-682-1191 (V/TT)  
Tourism Division  
501-682-7777 (V/TT)  
Internet  
www.arkansas.com

Mike Huckabee  
GOVERNOR

Richard W. Davies  
EXECUTIVE DIRECTOR

**STATE PARKS,  
RECREATION  
& TRAVEL  
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**AN EQUAL  
OPPORTUNITY/  
AFFIRMATIVE ACTION/  
AMERICANS WITH  
DISABILITIES ACT  
EMPLOYER**

**Arkansas**  
THE NATURAL STATE

February 29, 2000

RECEIVED

MAR - 3 2000

Barnard Dunkelberg

Kelly J. Maddoux  
Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

RE: NW AR Regional Airport Access  
AHTD #090069, FAP HPP-0238(1)

Dear Mr. Maddoux:

Enclosed is information from the Statewide Recreation Facilities database for the project area as requested. This information addresses public facilities that are owned and managed by government organizations only.

If you have any questions, please feel free to contact me at 501-682-6946.

Sincerely,

Carolyn Dover, SCORP Planner  
Outdoor Recreation and Grants



DOES LOCALITY HAVE LAND OR. FAC? ☒

Both Land and Facilities

NAME OF PARK\REC SITE Elm Springs City Park

CLOSEST MAJOR HIGHWAY Highway 112

SITE LOCATION\ADDRESS Jay Roe Street

OPER. BODY City

COUNTY Washington

CITY Elm Springs

OPER. AGENCY City of Elm Springs

OWNER City of Elm Springs

CONTACT PERSON Edward Thiesse, Mayor

LAST INV. DATE 7/93, 6/99

PHONE NUMBER 501-248-7323

US CONGRESS. DIST. 3

STATE SEN. DIST. 35

STATE REP. DIST. 9

#### SIZE OF THE AREA

Recreational Land Area (acres) \_\_\_\_\_ 9

Recreational Water Area (acres) \_\_\_\_\_

#### PLAYING FIELDS

Baseball/softball fields - unlighted (number) \_\_\_\_\_

Baseball/softball fields - lighted (number) \_\_\_\_\_ 1

Open Play Fields (number) \_\_\_\_\_

Soccer Fields (number) \_\_\_\_\_

#### COURTS

Tennis Courts - Unlighted (number) \_\_\_\_\_

Tennis Courts - Lighted (number) \_\_\_\_\_

Basketball Goals - Unlighted (number) \_\_\_\_\_

Basketball Goals - Lighted (number) \_\_\_\_\_

#### GOLF

Golf Course (number of holes) \_\_\_\_\_

Miniature Golf/Putt-Putt Courses (number) \_\_\_\_\_

Golf Driving Ranges (number) \_\_\_\_\_

#### SWIMMING

Swimming (number of pools) \_\_\_\_\_

Swimming (total sq. ft. area of pools) \_\_\_\_\_

Non-Pool Swimming Areas (number) \_\_\_\_\_

#### PLAYGROUNDS

Equipped Playgrounds (number) \_\_\_\_\_ 1

Equipped Tot Lots (number) \_\_\_\_\_

#### TRAILS

Hiking/Nature Trails (number) \_\_\_\_\_

Hiking/Nature Trails (miles) \_\_\_\_\_

Hiking/Nature Trails (names) \_\_\_\_\_

Running/Jogging Trails (number) \_\_\_\_\_ 1

Running/Jogging Trails (miles) \_\_\_\_\_

Running/Jogging Trails (names) \_\_\_\_\_

Exercise Trails/Fitness Course (number) \_\_\_\_\_ 1

Is there a Running Track at the Site? \_\_\_\_\_ No

#### TRAILS (cont'd)

Bicycle Trails (number) \_\_\_\_\_

Bicycle Trails (miles) \_\_\_\_\_  
Bicycle Trails (names) \_\_\_\_\_  
  
ORV Trails (number) \_\_\_\_\_  
ORV Trails (miles) \_\_\_\_\_  
ORV Trails (names) \_\_\_\_\_  
  
Horse Trails (number) \_\_\_\_\_  
Horse Trails (names) \_\_\_\_\_  
  
Horse Trails (miles) \_\_\_\_\_

---

#### WATER ACCESS

Fishing (surface acres of water) \_\_\_\_\_  
Fishing Piers or Docks (total number) \_\_\_\_\_  
Are there Handicap. Access. Piers/Docks at the Site? \_\_\_\_\_  
Boating (number of launching ramps) \_\_\_\_\_  
Marina (number of slips or stalls) \_\_\_\_\_

---

#### CAMPING

Camping - RV/Trailer Sites (number) \_\_\_\_\_  
Camping - Tent Sites (number) \_\_\_\_\_  
Camping - Cabins/Shelters (number) \_\_\_\_\_  
Camping - Primitive (acres) \_\_\_\_\_

---

#### PICNIC FACILITIES

Picnic Tables (number) \_\_\_\_\_ 8  
Picnic Shelters/Pavilions (number) \_\_\_\_\_ 1  
Are there Handicap. Access. Picnic Facilities at the Site? \_\_\_\_\_

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#### RANGES

Rifle/Pistol Ranges (number of positions) \_\_\_\_\_  
Skeet/Trap Ranges (number of positions) \_\_\_\_\_  
Archery Ranges (number of positions) \_\_\_\_\_

---

#### OTHER FACILITIES

Is there a Rodeo Arena at the Site? \_\_\_\_\_  
Amphitheater (number) \_\_\_\_\_  
Arboretum (number) \_\_\_\_\_  
Vehicle Parking (number of spaces) \_\_\_\_\_  
Are Handicap. Parking Spaces Available? \_\_\_\_\_  
Are Restroom Facilities Available at the Site? \_\_\_\_\_ Yes  
Are the Restroom Facilities Handicap Accessible? \_\_\_\_\_  
Are there Water Fountains Located at this Site? \_\_\_\_\_  
Concession Stands/Snack Bars \_\_\_\_\_  
Is there a Community/Recreation Center on the Site? \_\_\_\_\_ No

Comments? \_\_\_\_\_

DOES LOCALITY HAVE LAND OR. FAC?

NAME OF PARK/REC SITE Lake Lindale

CLOSEST MAJOR HIGHWAY Hwy 71

SITE LOCATION/ADDRESS Take Elm Springs Road; Exit off Hwy 71

OPER. BODY AG&FC

COUNTY Washington

CITY

OPER. AGENCY Arkansas Game & Fish Commission

OWNER State

CONTACT PERSON

LAST INV. DATE 7/93,

PHONE NUMBER

US CONGRESS. DIST. 3 - Hutchinson

STATE SEN. DIST.

STATE REP. DIST.

---

SIZE OF THE AREA

Recreational Land Area (acres) \_\_\_\_\_ 0

Recreational Water Area (acres) \_\_\_\_\_ 200

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PLAYING FIELDS

Baseball/softball fields - unlighted (number) \_\_\_\_\_

Baseball/softball fields - lighted (number) \_\_\_\_\_

Open Play Fields (number) \_\_\_\_\_

Soccer Fields (number) \_\_\_\_\_

---

COURTS

Tennis Courts - Unlighted (number) \_\_\_\_\_

Tennis Courts - Lighted (number) \_\_\_\_\_

Basketball Goals - Unlighted (number) \_\_\_\_\_

Basketball Goals - Lighted (number) \_\_\_\_\_

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GOLF

Golf Course (number of holes) \_\_\_\_\_

Miniature Golf/Putt-Putt Courses (number) \_\_\_\_\_

Golf Driving Ranges (number) \_\_\_\_\_

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SWIMMING

Swimming (number of pools) \_\_\_\_\_

Swimming (total sq. ft. area of pools) \_\_\_\_\_

Non-Pool Swimming Areas (number) \_\_\_\_\_

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PLAYGROUNDS

Equipped Playgrounds (number) \_\_\_\_\_

Equipped Tot Lots (number) \_\_\_\_\_

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TRAILS

Hiking/Nature Trails (number) \_\_\_\_\_

Hiking/Nature Trails (miles) \_\_\_\_\_

Hiking/Nature Trails (names) \_\_\_\_\_

Running/Jogging Trails (number) \_\_\_\_\_

Running/Jogging Trails (miles) \_\_\_\_\_

Running/Jogging Trails (names) \_\_\_\_\_

Exercise Trails/Fitness Course (number) \_\_\_\_\_

Is there a Running Track at the Site? \_\_\_\_\_

---

TRAILS (cont'd)

\_\_\_\_\_

Bicycle Trails (miles) \_\_\_\_\_

Bicycle Trails (names) \_\_\_\_\_

ORV Trails (number) \_\_\_\_\_

ORV Trails (miles) \_\_\_\_\_

ORV Trails (names) \_\_\_\_\_

Horse Trails (number) \_\_\_\_\_

Horse Trails (names) \_\_\_\_\_

Horse Trails (miles) \_\_\_\_\_

---

#### WATER ACCESS

Fishing (surface acres of water) \_\_\_\_\_

Fishing Piers or Docks (total number) \_\_\_\_\_

Are there Handicap. Access. Piers/Docks at the Site? \_\_\_\_\_

Boating (number of launching ramps) \_\_\_\_\_

2

Marina (number of slips or stalls) \_\_\_\_\_

---

#### CAMPING

Camping - RV/Trailer Sites (number) \_\_\_\_\_

Camping - Tent Sites (number) \_\_\_\_\_

Camping - Cabins/Shelters (number) \_\_\_\_\_

Camping - Primitive (acres) \_\_\_\_\_

---

#### PICNIC FACILITIES

Picnic Tables (number) \_\_\_\_\_

Picnic Shelters/Pavilions (number) \_\_\_\_\_

Are there Handicap. Access. Picnic Facilities at the Site? \_\_\_\_\_

---

#### RANGES

Rifle/Pistol Ranges (number of positions) \_\_\_\_\_

Skeet/Trap Ranges (number of positions) \_\_\_\_\_

Archery Ranges (number of positions) \_\_\_\_\_

---

#### OTHER FACILITIES

Is there a Rodeo Arena at the Site? \_\_\_\_\_

Amphitheater (number) \_\_\_\_\_

Arboretum (number) \_\_\_\_\_

Vehicle Parking (number of spaces) \_\_\_\_\_

Are Handicap. Parking Spaces Available? \_\_\_\_\_

Are Restroom Facilities Available at the Site? \_\_\_\_\_

Are the Restroom Facilities Handicap Accessible? \_\_\_\_\_

Are there Water Fountains Located at this Site? \_\_\_\_\_

Concession Stands/Snack Bars \_\_\_\_\_

Is there a Community/Recreation Center on the Site? \_\_\_\_\_

Comments?

DOES LOCALITY HAVE LAND OR. FAC ? Both Land and Facilities

NAME OF PARK/REC SITE Cave Springs City Park

CLOSEST MAJOR HIGHWAY Highway 112

SITE LOCATION\ADDRESS Johnson Street

OPER. BODY City

COUNTY Benton

CITY Cave Springs

OPER. AGENCY City of Cave Springs

OWNER City of Cave Springs

CONTACT PERSON Thekla Wallis, Mayor

LAST INV. DATE 7/93, 6/99

PHONE NUMBER 501-248-1670

US CONGRESS. DIST. 3 - Hutchinson

STATE SEN. DIST. 34

STATE REP. DIST. 1

#### SIZE OF THE AREA

Recreational Land Area (acres) \_\_\_\_\_

Recreational Water Area (acres) \_\_\_\_\_

#### PLAYING FIELDS

Baseball/softball fields - unlighted (number) \_\_\_\_\_

Baseball/softball fields - lighted (number) \_\_\_\_\_

Open Play Fields (number) \_\_\_\_\_

Soccer Fields (number) \_\_\_\_\_

#### COURTS

Tennis Courts - Unlighted (number) \_\_\_\_\_

Tennis Courts - Lighted (number) \_\_\_\_\_

Basketball Goals - Unlighted (number) \_\_\_\_\_

Basketball Goals - Lighted (number) \_\_\_\_\_

#### GOLF

Golf Course (number of holes) \_\_\_\_\_

Miniature Golf/Putt-Putt Courses (number) \_\_\_\_\_

Golf Driving Ranges (number) \_\_\_\_\_

#### SWIMMING

Swimming (number of pools) \_\_\_\_\_

Swimming (total sq. ft. area of pools) \_\_\_\_\_

Non-Pool Swimming Areas (number) \_\_\_\_\_

#### PLAYGROUNDS

Equipped Playgrounds (number) \_\_\_\_\_ 1

Equipped Tot Lots (number) \_\_\_\_\_ 1

#### TRAILS

Hiking/Nature Trails (number) \_\_\_\_\_

Hiking/Nature Trails (miles) \_\_\_\_\_

Hiking/Nature Trails (names) \_\_\_\_\_

Running/Jogging Trails (number) \_\_\_\_\_ 1

Running/Jogging Trails (miles) \_\_\_\_\_ 1

Running/Jogging Trails (names) \_\_\_\_\_

Exercise Trails/Fitness Course (number) \_\_\_\_\_

Is there a Running Track at the Site? \_\_\_\_\_

#### TRAILS (cont'd)

Bicycle Trails (number) \_\_\_\_\_

Bicycle Trails (miles) \_\_\_\_\_  
Bicycle Trails (names) \_\_\_\_\_  
  
ORV Trails (number) \_\_\_\_\_  
ORV Trails (miles) \_\_\_\_\_  
ORV Trails (names) \_\_\_\_\_  
  
Horse Trails (number) \_\_\_\_\_  
Horse Trails (names) \_\_\_\_\_  
  
Horse Trails (miles) \_\_\_\_\_

---

#### WATER ACCESS

Fishing (surface acres of water) \_\_\_\_\_  
Fishing Piers or Docks (total number) \_\_\_\_\_  
Are there Handicap. Access. Piers/Docks at the Site? \_\_\_\_\_  
Boating (number of launching ramps) \_\_\_\_\_  
Marina (number of slips or stalls) \_\_\_\_\_

---

#### CAMPING

Camping - RV/Trailer Sites (number) \_\_\_\_\_  
Camping - Tent Sites (number) \_\_\_\_\_  
Camping - Cabins/Shelters (number) \_\_\_\_\_  
Camping - Primitive (acres) \_\_\_\_\_

---

#### PICNIC FACILITIES

Picnic Tables (number) \_\_\_\_\_ 6  
Picnic Shelters/Pavilions (number) \_\_\_\_\_ 1  
Are there Handicap. Access. Picnic Facilities at the Site? \_\_\_\_\_

---

#### RANGES

Rifle/Pistol Ranges (number of positions) \_\_\_\_\_  
Skeet/Trap Ranges (number of positions) \_\_\_\_\_  
Archery Ranges (number of positions) \_\_\_\_\_

---

#### OTHER FACILITIES

Is there a Rodeo Arena at the Site? \_\_\_\_\_  
Amphitheater (number) \_\_\_\_\_  
Arboretum (number) \_\_\_\_\_  
Vehicle Parking (number of spaces) \_\_\_\_\_  
Are Handicap. Parking Spaces Available? \_\_\_\_\_  
Are Restroom Facilities Available at the Site? \_\_\_\_\_  
Are the Restroom Facilities Handicap Accessible? \_\_\_\_\_  
Are there Water Fountains Located at this Site? \_\_\_\_\_  
Concession Stands/Snack Bars \_\_\_\_\_  
Is there a Community/Recreation Center on the Site? \_\_\_\_\_

Comments?



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

Planning, Environmental and Regulatory Division  
Regulatory Branch

RECEIVED  
MAR - 1 2000  
Barnard Dunkelberg

Mr. Kelly J. Maddoux  
Barnard Dunkelberg and Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

SUBJECT: Permit Application No. 16320

Dear Mr. Maddoux:

Please refer to your letter dated January 19, 2000 on behalf of the Federal Highway Administration, Arkansas State Highway and Transportation Department, and the Northwest Arkansas Regional Airport Authority concerning a proposed intermodal access toll road in Washington and Benton Counties, Arkansas. Your request has been assigned File No. 16320.

Mr. Larry Harrison has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible. However, because of our permit workload, it will take a while for us to respond. You may be contacted for additional information about your request.

If you have any questions about the evaluation of your request, please contact Mr. Harrison at the address below or at phone number (501) 324-5295 and refer to your assigned file number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

U.S. Army Corps of Engineers  
Little Rock District  
ATTN: Regulatory Branch  
P.O. Box 867  
Little Rock, Arkansas 72203-0867



ARKANSAS  
Department of Environmental Quality

February 14, 2000

RECEIVED  
FEB 18 2000  
Barnard Dunkelberg

Mr. Kelly J. Maddoux  
BARNARD DUNKELBERG & COMPANY  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

Re: Northwest Arkansas Regional Airport Access  
AHTD #090069, FAP HPP-0238(1)

Dear Mr. Maddoux:

On behalf of the Arkansas Department of Environmental Quality I welcome the opportunity to provide comments on the above mentioned project. The area of the proposed construction project does have some significant environmental findings that should be considered in the preparation of the Environmental Impact Statement.

One area of major concern with the agency is the preservation of our endangered species and their habitats, one of which is the Ozark cavefish. Its official status under the Threatened Endangered Species Act is "threatened". This particular species is currently colonized in the outlying project area, and, it should be acknowledged as a significant factor in the compilation of data for the EIS.

I would also like to make you aware of the geology in this area, which is known as 'karst topography'. As you well know, karst topography is extremely ecologically-sensitive when it comes to water-bourne pollutants. Great care will need to be taken in the construction and maintenance of this highway to protect the Ozark cavefish and the surface/groundwater of the area, as a whole.

I have enclosed, for your convenience, a copy of the study "Monitoring Cavefish Populations and Environmental Quality in Cave Springs Cave, Arkansas" by Dr. Arthur V. Brown, Dr. G. O. Graening, and Dr. Paul Vendrell of the Arkansas Water Resources Center at the University of Arkansas, Fayetteville, Arkansas.



Mr. Kelly J. Maddoux

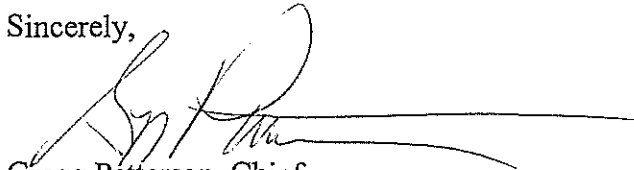
Page 2

February 14, 2000

I trust that this research material will give you some additional information, relative to the environmentally-sensitive issues we have addressed. In addition, I have included a draft map that was developed by our Geographical Information Systems (GIS) section outlining the proposed area that will be affected.

Thank you again for presenting us with the opportunity to make our comments on these issues of importance. We are always grateful for any and all efforts of support in the preservation of our natural resources. Please do not hesitate to contact me if I can be of further assistance to you in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Gregg Patterson', followed by a long horizontal line extending to the right.

Gregg Patterson, Chief  
Environmental Preservation Division

GP/mb

cc: Mr. Randall Mathis, Director, AR Dept of Environmental Quality  
Mr. Jim Shirrell, Deputy Director, AR Dept of Environmental Quality  
Mr. Larry Wilson, Deputy Director, AR Dept of Environmental Quality  
Mr. Eddie Dickerson, Administration, AR Dept of Environmental Quality  
Mr. Chuck Bennett, Chief, Water Division, AR Dept of Environmental Quality  
Mr. Allan Mueller, Field Supervisor, US Fish & Wildlife Service  
Mr. John Beneke, Chief of Stewardship, AR Natural Heritage Commission  
Mrs. Cindy Osborne, AR Natural Heritage Commission  
Dr. Arthur V. Brown, Dept of Biological Sciences, University of Arkansas  
Mr. Brian Wagner, Non-Game Resource Biologist, AR Game & Fish Commission  
Mr. Marion Butler, Environmental Division, AR Highway & Transportation Dept  
Mr. Ken Perrett, Division Administrator, Federal Highway Administration

408  
**BEAVER WATER DISTRICT**

101 Primrose Road  
P.O. Box 400  
Lowell, Arkansas 72745

February 10, 2000

Kelly J. Maddoux  
Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

**RECEIVED**  
FEB 22 2000  
Barnard Dunkelberg

Re: NWARAA AHTD#090069, FAP HPP-0238(1)

Gentlemen:

Beaver Water District has no facilities in the study area map enclosed in your letter dated January 26, 2000.

It should be noted that the study area includes a recharge area for underground water resources that contain endangered species.

Sincerely yours,

*Richard Starr*  
Richard Starr, P.E. *JB*  
Engineer-Manager

RS:jb



# Arkansas GEOLOGICAL COMMISSION

VARDELLE PARHAM GEOLOGY CENTER • 3815 WEST ROOSEVELT ROAD • LITTLE ROCK, ARKANSAS 72204

Mike Huckabee  
Governor  
William V. Bush  
Director and State Geologist

February 11, 2000

**RECEIVED**

FEB 14 2000

**Barnard Dunkelberg**

Kelly J. Maddoux  
Barnard Dunkelberg & Co.  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, OK 74120-6027

Dear Ms. Maddoux:

This letter is in response to your request for resource information and areas of concern in relation to Northwest Arkansas Regional Airport Access, AHT #090069, FAP HPP-0238(1), which will be used in preparing an Environmental Impact Statement.

John David McFarland, of my staff, has made an in-house review of available data. A copy of his report is attached. If you have additional questions or need more information about a specific site, please call Mr. McFarland or me.

Sincerely,

William V. Bush

cc: Dan Flowers, AHTD



# Arkansas GEOLOGICAL COMMISSION

VARDELLE PARHAM GEOLOGY CENTER • 3815 WEST ROOSEVELT ROAD • LITTLE ROCK, ARKANSAS 72204

Mike Huckabee  
Governor

William V. Bush  
Director and State Geologist

## GEOLOGIC REPORT NW ARKANSAS REGIONAL AIRPORT ACCESS, AHTD# 090069, FAP HPP-0238(1)

by  
John David McFarland, III  
Arkansas Geological Commission

The area in Washington and Benton Counties outlined in the documentation provided by Barnard Dunkelberg & Company is all underlain by the Boone Formation, a thick sequence of interbedded limestone and chert. The full Boone Formation is usually 350-390 feet thick but a variable section of the upper part of the sequence has been removed by erosion. Geologic mapping in the area indicates that the present land surface is developed on the upper part of the Boone Formation sequence. No significant faults have been mapped in the area. The area is a karst terrain and has an unknown number of subterranean cavities and their associated biology. Many springs issue from the Boone and are of local importance. The Boone is a principle source of drinking water in the rural areas of the region via water wells.

The mineral resources known in and around the area potentially include limestone, clay, sand & gravel, lead & zinc, and tripoli.

Limestone is quarried from the Boone for use as concrete aggregate, crushed stone, agriculture lime, and chemical lime. Reserves of limestone suitable for these uses are large and generally ubiquitous. Few quarries are in current operation in the designated area.

Clay is usually found in small residual pockets. These clays have been used for making brick and tile in the past, but no specific deposits are known in the designated area. No serious exploration has been conducted so the exact potential of the resource cannot be judged, however it is not thought to be significant.

Sand & gravel is found in the beds and floodplains of the streams in the area. This resource is common throughout the region. Many small production operations are or have been located in the designated area.

Lead & zinc mineralization traces have been found in the region but no specific deposits are known in the designated area. Commercial quantities are not expected to be discovered.

Tripoli has been found in some places in the region but no mines are in current operation. Most of the known deposits are too small for commercial development. No deposits are known in the designated area.



# Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

Fay W. Boozman, M.D. Director

Mike Huckabee, Governor

February 8, 2000

408  
**RECEIVED**

FEB 14 2000

Barnard Dunkelberg

Kelly J. Maddoux  
Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

Re: Environmental Impact Study  
Northwest Arkansas Regional Airport Access  
AHTD # 090069, FAP HPP-0238(1)

Dear Mr. Maddoux:

We have reviewed your request for information on resources that may be impacted by construction of the proposed access road.

Areas of concern include Springdale's Water System that extends west and northwest to include servicing the Cave Springs and Elm Springs areas. West of Elm Springs, Washington Water Authority has water service lines that could be affected. Future construction of water lines by the Benton County Water Authority # 2 will be installed around the High Fill area.

We have previously checked our cemetery files and could not find any that should affect the project, but there is always a possibility of unregistered cemeteries in the area.

Points of contact for the above areas are listed below:

1. Springdale Waterworks—Renee Langston @ 501-751-5751
2. Cave Springs Waterworks—Darrell Wright @ 501-248-1040
3. Washington Water Authority—Lockert Chambers @ 501-267-2111
4. Benton County Water Authority #2—Marvin Roller @ 501-736-2927

If we can be of further service, please advise. My phone number is 501-661-2623/2662.

Sincerely,

Roy A. Davis  
District Engineer  
Division of Engineering

***Keeping Your Hometown Healthy***

*"An Equal Opportunity Employer"*



United States  
Department of  
Agriculture

Natural Resources  
Conservation  
Service

408  
Federal Building Room 3416  
700 W. Capitol Avenue  
Little Rock, AR 72201-3225

February 7, 2000

Mr. Kelly J. Maddoux  
Barnard Dunkelberg & Co.  
Cherry Bldg, 1616 E. 15<sup>th</sup> St  
Tulsa, OK 74120

Dear Mr. Maddoux

408  
FEB 7 2000  
This is in response to your request concerning a proposed highway project in Washington and Benton Counties, Arkansas, that will provide access to the Northwest Arkansas Regional Airport. Based on a review of the published soil survey for these counties, the proposed project may have an impact on Important Farmland.

If you have any questions or need additional information, please contact Glen Laurent, Resource Soil Scientist at phone 501 442-4160 Ext. 113.

Sincerely,

Richard T. Fielder  
Soil Scientist, NRCS-USDA



# Arkansas Department of Human Services

## Administrative Services

Donaghey Plaza West  
P.O. Box 1437  
Little Rock, Arkansas 72203-1437  
FAX (501) 682-6444 TDD (501) 682-6441

468  
**RECEIVED**

FEB 16 2000

Barnard Dunkelberg

February 7, 2000

Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, OK 74120-6027

Attn: Mr. Kelly J. Maddoux

Dear Mr. Maddoux,

We are in receipt of your letter of January 26, 2000 concerning the Northwest Arkansas Regional Airport Access, AHTD #090069, FAP HPP-0238(1). We have reviewed the map that was enclosed defining the area under consideration. We can find no Department of Human Services facilities or operations in this area that might be affected by this project.

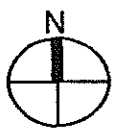
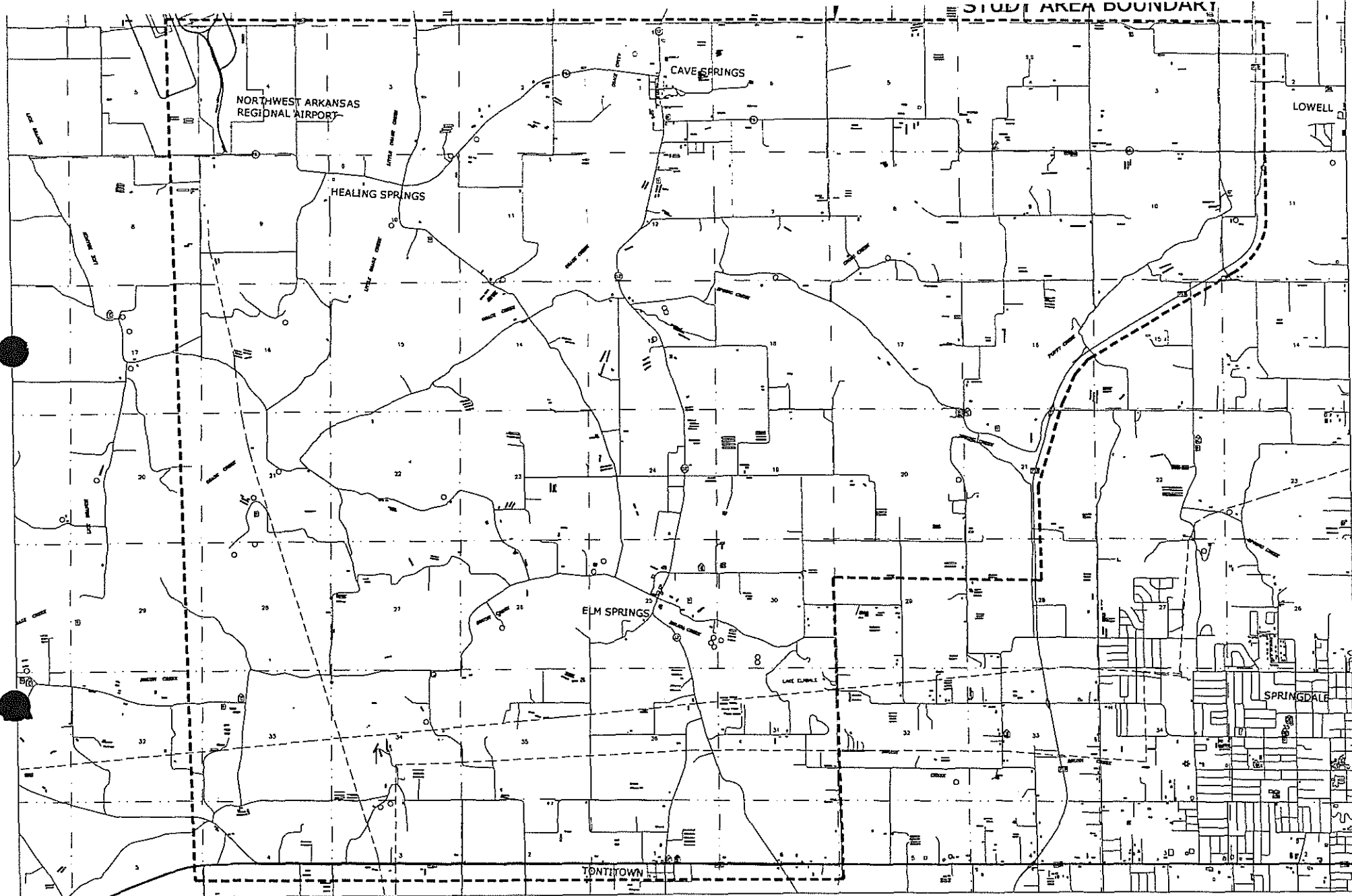
We thank you for considering the Department of Human Services in your study and if you have any questions please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Roy Hart".

Roy Hart  
Chief Administrative Officer  
Department of Human Services

207



Scale 1" = 1 mile

January 19, 2000

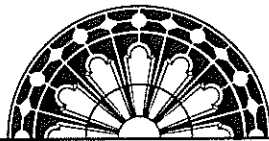
Northwest Arkansas  
Regional Airport

State Project No 090069

FAP HPP-0238(1)

INTERMODAL ACCESS ROAD





January 24, 2000

ARKANSAS  
HISTORIC  
PRESERVATION  
PROGRAM

Mr. Kelly J. Maddoux  
Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

JAN 26 2000

RE: Multi-County - General  
Section 106 Review - FAA; AHPP Tracking No. #39908  
Proposed Northwest Arkansas Regional Airport Access In  
Washington And Benton Counties  
(AHTD#090069, FAP HPP-0238(1))

Dear Mr. Maddoux:

This letter is written in response to your inquiry, regarding properties of architectural, historical, or archeological significance in the area of the proposed referenced project.

In order for the Arkansas Historic Preservation Program (AHPP) to complete its review of the proposed project, we will need the additional information checked below:

- ☒ a 7.5 minute U.S.G.S topographic map clearly delineating the project area;
- ☒ a project description detailing all aspects of the proposed project;
- ☒ the location, age, and photographs of structures (if any) to be renovated, removed, demolished, or abandoned as a result of this project;
- ☒ photographs of any structures 50 years old or older on property directly adjacent to the project area.

Once we have received the above information, we will complete our review as expeditiously as possible. If you have any questions, please contact me at (501) 324-9880.

Sincerely,

George McCluskey  
Senior Archeologist

1500 Tower Building • 323 Center • Little Rock, Arkansas 72201 • Phone (501) 324-9880  
Fax (501) 324-9184 • TDD (501) 324-9811  
A Division of the Department of Arkansas Heritage





ARKANSAS  
Department of Environmental Quality

December 21, 2004

DEC 27 2004

Mr. Ryk A. Dunkelberg  
Bernard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120

RE: Northwest Arkansas Regional Airport Intermodal Access Road, Washington and Benton Counties, Arkansas; AHTD # 090069, FAP HPP-0238(1)

Dear Mr. Dunkelberg:

The Arkansas Department of Environmental Quality (ADEQ) has reviewed the information submitted on the referenced project. The Water Division has the following comments:

Due to the karst geology of this area, the ground water is very susceptible to contamination from surface activity. This area is also of great ecological importance due to the presence of ecologically sensitive species such as the Ozark cavefish, Southern cavefish, cave snails, cave crawfish and other unique invertebrates. These populations could be severely impacted by sedimentation associated with this type of construction if extreme care is not taken.

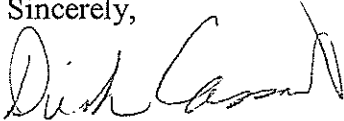
The ADEQ's Regulation No. 2 identifies many areas in these counties as Ecologically Sensitive due to the numerous springs and spring-fed tributaries. These water bodies support numerous ecologically sensitive species such as the Arkansas darter, Least darter, Oklahoma salamander, and other unique invertebrates. The contractor should make certain that these species are not impacted by this project.

Many of the waterways in the area are interstate water bodies. The States of Arkansas and Oklahoma have entered into an agreement to reduce pollutants and minimize potential impacts to water bodies that flow from Arkansas into Oklahoma. Therefore, the applicant should restrict in-stream activity to the dry season, so that the potential impacts of turbidity and sedimentation to the waters of northwest Arkansas and the sub-surface ecosystem will be minimized.

Mr. Ryk A. Dunkelberg  
RE: Northwest Arkansas Regional Airport Intermodal Access Road  
Page 2

If you have any questions or concerns, please contact Audree Miller at (501) 682-0015.

Sincerely,

A handwritten signature in black ink, appearing to read "Dick Cassat". The signature is fluid and cursive, with a large initial "D" and a stylized "C".

Dick Cassat  
Chief, Technical Services Division

cc: Mary Leath, Chief Deputy Director  
Martin Maner, Chief, Water Division  
Nat Nehus, Technical Services Division



# ARKANSAS ARCHEOLOGICAL SURVEY

Sponsored Research Program, 2475 N. Hatch, Fayetteville AR 72703 Phone: (501)575-6560, Fax: (501) 575-5453

January 16, 2001

Mr. Ryk Dunkelberg  
Barnard Dunkelberg and Company  
Cherry Street Building  
1616 E. 15th Street  
Tulsa, Oklahoma 74120

RE: A Phase I Cultural Resources Survey of the Proposed Northwest Arkansas Regional Airport  
Connector Road, Alternates 4 and 5, Benton and Washington Counties, Arkansas  
AAS Project 00-08

Dear Mr. Dunkelberg,

Enclosed please find three copies of the draft report referenced above. We look forward to any comments you may have on this report. A copy of this report has been forwarded to Mr. George McCluskey of the Arkansas Historic Preservation Program office for comment also.

Please indicate your acceptance of the draft report by signing below and returning one copy of this letter to us. As stipulated in our proposal, we ask that you respond within 45 days of receipt of our report with your comments and/or letter of acceptance. After this period the report will be considered accepted.

We have enjoyed providing this study for you and hope to be of service for any future cultural resources studies you may need in Arkansas.

Sincerely,

Robert C. Mainfort, Jr.  
Research Administrator

The attached report has been received and accepted:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



# The Department of Arkansas Heritage

Mike Huckabee, Governor  
Cathie Matthews, Director

Arkansas Arts Council

Arkansas Natural Heritage  
Commission

Historic Arkansas Museum

Delta Cultural Center

Old State House Museum



## Arkansas Historic Preservation Program

1500 Tower Building  
323 Center Street

Little Rock, AR 72201  
(501)324-9880

fax: (501)324-9184

tdd: (501)324-9811

e-mail:  
info@arkansaspreservation.org  
website:  
www.arkansaspreservation.org

September 5, 2001

Dr. Robert C. Mainfort, Jr.  
Research Administrator  
Arkansas Archeological Survey  
2475 North Hatch Avenue  
Fayetteville, Arkansas 72704

SEP 10 2001

RE: Benton County – General  
Section 106 Review – FAA  
Proposed Connector Road to the Northwest Arkansas Regional  
Airport, Benton County, Arkansas  
AHPP Tracking No. 41955

Dear Dr. Mainfort:

My staff has reviewed the report entitled *A Phase I Cultural Resources Survey of the Proposed Regional Airport Connector Road, Alternates 4 and 5, Benton and Washington Counties, Arkansas*. This report is acceptable and we concur with the findings contained therein.

Thank you for your interest and concern for the cultural heritage of Arkansas. If you have any questions, please contact Steve Imhoff of my staff at (501) 324-9880.

Sincerely,

Ken Grunewald  
Deputy State Historic Preservation Officer

cc: Federal Aviation Administration  
Osage Nation  
Arkansas Archeological Survey  
✓ Barnard Dunkelberg and Company





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

1500 Museum Road, Suite 105

Conway, Arkansas 72032

Tel.: 501/513-4470 Fax: 501/513-4480

IN REPLY REFER TO:

February 28, 2001

FILED  
MAR - 1 2001  
Barnard Dunkelberg

Mr. Ryc Dunkelberg  
Barnard Dunkelberg & Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120

Dear Mr. Dunkelberg:

The Fish and Wildlife Service (Service) appreciated the opportunity to participate in the informational meeting on February 20, 2001 concerning the proposed alignments for the Northwest Arkansas Airport access road. As presented at the meeting, a decision has been made to eliminate the three northern alignments from further consideration since they cross the recharge area for Cave Springs cave and therefore selection of these alternatives may adversely affect endangered and threatened species that are present in Cave Springs cave and other underground channels in the vicinity of the project area. We understand that Alternatives 4 and 5 will be carried forward for detailed analysis as the study and preparation of the Environmental Impact Statement proceeds. The Service supports this decision which will avoid potential adverse impacts to listed species that are associated with Alternativer 1, 2, and 3.

Sincerely,

Margaret Harney  
Environmental Coordinator

cc:

Arkansas Game and Fish Commission, Little Rock, Arkansas

Attn: Bob Leonard

Arkansas Natural Heritage Commission, Little Rock, Arkansas

Attn: Cindy Osborne



IN REPLY REFER TO:

# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

1500 Museum Road, Suite 105

Conway, Arkansas 72032

Tel.: 501/513-4470 Fax: 501/513-4480

February 28, 2000

RECEIVED

MAR - 2 2000

Barnard Dunkelberg

Mr. Ryk A. Dunkelberg  
Barnard Dunkelberg & Company  
1616 East Fifteenth Street  
Tulsa, OK 74120-6027

Dear Mr. Dunkelberg:

The Fish and Wildlife Service (Service) has reviewed the information provided with your letter dated February 18, 2000 concerning the proposed Northwest Arkansas Regional Airport intermodal access road in Washington and Benton Counties, Arkansas. Our comments are submitted in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401. 16 U.S.C. as amended 616 et seq.).

The area of the proposed access road in northwest Arkansas is known for its karst topography. The caves and underground channels in Washington and Benton Counties provide habitat for the threatened Ozark cavefish, an endangered cave crayfish, as well as three endangered bat species, the Ozark big-eared bat, the Indiana bat, and the gray bat. A candidate species, the Arkansas darter is known from Clabber Creek and Wilson Spring. The proposed access road may impact these species through direct alteration of the cave habitat or through the alteration of the recharge areas. In addition, the threatened bald eagle is known to occur in the vicinity of Beaver Lake.

We look forward to working with you as planning for this project proceeds and appreciate your interest in the protection of endangered species.

Sincerely,

Margaret Harney  
Acting Field Supervisor

cc:

Arkansas Game and Fish Commission, Little Rock, Arkansas

Attn: Bob Leonard

Arkansas Natural Heritage Commission, Little Rock, Arkansas

**JIM GRAY**

Principal Chief

**KENNETH H. BIGHORSE**

Assistant Principal Chief



**MEMBERS OF COUNCIL**

MARK FREEMAN Jr.  
TERRY MASON MOORE  
HARRY ROY RED EAGLE  
JODIE SATEPAUHOODLE  
JERRY SHAW  
PAUL R. STABLER  
DUDLEY WHITEHORN  
JOHN W. WILLIAMS

**OSAGE TRIBAL COUNCIL**

**RECEIVED**

**JAN 20 2005**

**Barnard Dunkelberg**

January 19, 2005

Barnard Dunkelberg & Co.  
Attn: Ryk A. Dunkelberg  
1616 E. 15<sup>th</sup> St.  
Tulsa, OK 74102

RE: NW Arkansas Regional Airport Access, AHTD # 090069, FAP Hpp-0238 (1)

To Whom It May Concern:

The Osage Tribe of Oklahoma has evaluated the above reference sites, and we have determined that the site could have religious or cultural significance to the Osage Tribe being our former reservation & homeland. However, if construction activities should expose Osage archeological materials, such as bone, pottery, chipped stone, etc., we ask that construction activities cease, and this office be contacted so that an evaluation can be made

Should you have any questions, you can reach me at (918) 287-5446.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Anthony P. Whitehorn".

Anthony P. Whitehorn  
Tribal Enterprise Manager





**FEMA**

December 27, 2004

**RECEIVED**

**JAN - 3 2005**

**Barnard Dunkelberg**

Mr. Ryk A. Dunkelberg  
Barnard Dunkelberg and Company  
1616 East Fifteenth Street  
Tulsa, OK 74120

Re: Northwest Arkansas Regional Airport Access AHTD# 090069

Dear Mr. Dunkelberg:

We have received your letters; thank you for the opportunity to comment on the above-proposed project. The concerns of the Federal Emergency Management Agency (FEMA) are directed toward the National Flood Insurance Program (NFIP) and the possible negative impact upon identified flood hazard areas and wetlands within the outlined project boundaries.

Our comment is that when any new development or construction is being considered that you consult with the local Floodplain Administrators (FPA) for surrounding counties and communities that may be affected.

If you have any questions, you may contact me at (940) 898-5279.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda Delamare", is written over a horizontal line.

Linda Delamare  
Natural Hazards  
Program Specialist

cc: Michael Borengasser, State NFIP Coordinator



United States  
Department of  
Agriculture

Natural Resources  
Conservation  
Service

Federal Building Room 3416  
700 W. Capitol Avenue  
Little Rock, AR 72201-3225

February 7, 2000

Mr. Kelly J. Maddoux  
Barnard Dunkelberg & Co.  
Cherry Bldg, 1616 E. 15<sup>th</sup> St  
Tulsa, OK 74120

RECEIVED  
FEB - 2000  
Barnard Dunkelberg

Dear Mr. Maddoux

This is in response to your request concerning a proposed highway project in Washington and Benton Counties, Arkansas, that will provide access to the Northwest Arkansas Regional Airport. Based on a review of the published soil survey for these counties, the proposed project may have an impact on Important Farmland.

If you have any questions or need additional information, please contact Glen Laurent, Resource Soil Scientist at phone 501 442-4160 Ext. 113.

Sincerely,

Richard T. Fielder  
Soil Scientist, NRCS-USDA



# THE Nature Conservancy

## ARKANSAS FIELD OFFICE

08/10/2000

Barnard Dunkelberg and Company  
Cherry Street Building  
1616 East Fifteenth Street  
Tulsa, Oklahoma 74120-6027

**RECEIVED**

AUG 23 2000

**Barnard Dunkelberg**

Re:AHTDJobNumber090069

Benton and Washington Counties

Dear Sir:

The Nature Conservancy is a non-profit, non-governmental international conservation organization with offices in all states, including Arkansas. The Conservancy's mission is conservation of biological diversity, including plants, animals and natural communities, by protecting the lands and waters they need to survive.

We are writing to comment on the proposed Northwest Arkansas Airport Intermodal Access Road, AHTD Job Number090069. The proposed routes are all in the Karst limestone region of Benton and Washington Counties. Karst is a landscape of topographic depressions, fractures, sinkholes, and caves caused by underground solution of limestone bedrock. Surface water percolates to groundwater and the underlying aquifer very quickly in this Karst limestone region. Therefore, there is very little filtering of nutrients and other potential pollutants.

Cave Springs Cave is close to the proposed routes. Cave Springs Cave is home to the Gray bat, *Myotis grisescens* and the Ozark cavefish, *Amblyopsis rosae*; both are Federally listed species. Researchers have identified the recharge area for Cave Springs Cave. The recharge area is the land surface that yields its surface water to the cave stream or aquifer. Hazardous material spills within the recharge area could negatively affect the water quality of the aquifer very quickly and could kill the listed species outright or drive them out of the cave where they would perish from temperature shock or predation. The Northwest Arkansas Airport Intermodal Access Road would be a potential location for a hazardous material spill and should be built outside of the Cave Springs Cave recharge area. Corridors 1, 2, 3 are within the recharge area for part of their length and should not be considered further. We suggest that Corridor 4 would be the best route because it is out of the recharge area and draws traffic from Highway 71 more efficiently than Corridors 5 and 6.

By building Northwest Arkansas Airport Intermodal Access Road within Corridor 4 it could link up with the Springdale Northern By-pass (AHTD Job#040266) at a point close to State Highway 112 and a savings of about four miles of new roadway construction would result. This would reduce the total amount of impacted property. There would also be a huge savings in dollars spent by considering both projects simultaneously.



601 North University Avenue / Little Rock, Arkansas 72205 / (501) 663-6699 FAX (501) 663-8332


International Headquarters / 4245 North Fairfax Drive, Suite 100 / Arlington, Virginia 22203-1606

♻ Recycled Paper

Enclosed is a map of the Northwest Arkansas Airport Intermodal Access Road alternative routes (in green) overlaid on the Springdale Northern By-pass Corridors (in purple). Linking the planning of these two projects would be the most efficient use of funds. The decrease in new roadway construction would be a benefit to the environment. Locating new road construction outside of Cave Springs Cave recharge area will help to protect ground water quality and the Federally Listed species living in Cave Springs Cave.

The Nature Conservancy recognizes the importance of improved transportation to the economy and people of Northwest Arkansas, and we appreciate the opportunity to comment on the proposed routing of this and other State Highway projects in Arkansas.

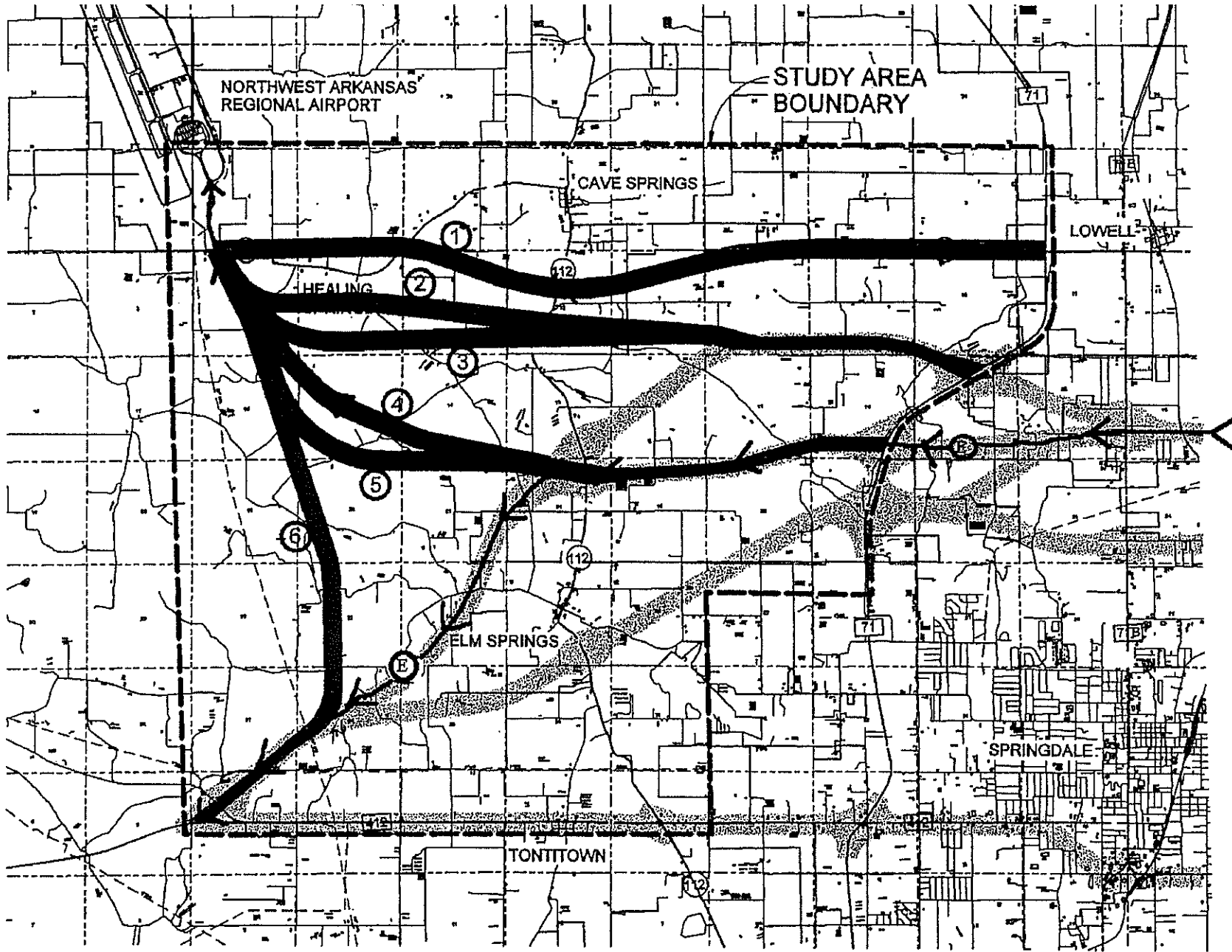
Sincerely,





Tim Snell  
Western Ozark Project Manager  
The Nature Conservancy  
Arkansas Field Office  
P.O. Box 222 Winslow AR 72959  
(501) 634-7213      (501) 634-2054 FAX

enclosures

cc: Marion Butler, (w/enclosures)  
Environmental Division  
Arkansas State Highway and Transportation Department  
P.O. Box 2261  
Little Rock, AR 72203-2261



LEGEND

-  AIRPORT INTERMODAL ALTERNATIVES
-  SPRINGDALE BYPASS ALTERNATIVES

NORTHWEST ARKANSAS REGIONAL AIRF  
INTERMODAL ACCESS R  
STUDY AREA  
STATE PROJECT NO. 09  
FAP HPP-02

MARCH 28, 2000



Fulbright College of Arts and Sciences  
Department of Biological Sciences

A. V. Brown  
G. O. Graening  
629 Science-Engineering Building  
Fayetteville, Arkansas 72701-1201  
(501) 575-3251  
(501) 575-4010 (FAX)

3/29/00

Jerry Farrar  
CH2M-Hill

### Statement of the Ecological Impact of Construction of the NWA Intermodal Access Road

The impact upon groundwater resources of the Intermodal Access Road to Northwest Arkansas Regional Airport is assessed. Short-term impacts consist primarily of degradations in water quality, especially sedimentation and pollution from the drainage of construction-related chemicals (especially petroleum products) off the road rights-of-way. Long-term impacts consist of water quality and water quantity stressors, including the loss of cave, spring, and stream habitat, intoxication by accidental spill of hazardous substances or the drainage of chemicals (de-icers, petroleum residues, etc.) off the road rights-of-way; and the alteration of hydrologic flow regime, especially the loss of spring recharge from the increase in impervious surfaces (both roads and their associated commercial developments). Several important cave resources and endangered species' habitats will be impacted as well.

It is suggested that two documents prepared by Tom Aley of the Ozark Underground Laboratory for previous State of Arkansas road projects be consulted for this new road construction project:

- o *Prevention of adverse impacts on endangered, threatened, and rare animal species in Benton and Washington Counties, Arkansas.*
- o *Highway 71 relocation, Fayetteville – McKissic Creek, administrative action, final environmental impact statement.*

The entire study area is underlain by karst topography, and this geologic setting typically harbors a plethora of cave resources and allows rapid transport of surface materials into the groundwater via karst windows. It is recommended that road construction activities cease immediately when a karst feature, such as a collapsed doline, fissure, spring, or losing stream, is encountered. At this point, civil engineers/geologists should evaluate the structural integrity of the area, and biologists/speleologists should evaluate the biological and speleological resources. Together, this group should decide the best plan of action, which may include the rerouting of the road, plugging, capping or filling the karst feature, or the rerouting of water flow. Responding properly to karst features will enhance protection of cave resources and will produce a superior, lower-maintenance road.

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APR 03 2000

Sedimentation is a major threat to cave resources, and all efforts should be made to detain storm water runoff from the construction sites. Properly maintained silt fences (straw bale or hardware cloth) are a necessity in all drainage areas, and construction activities should cease during and immediately after spates. Waste fill dirt should not be deposited in losing streams, depressions (dolines), or valleys because these features are associated with karst processes.

One of the greatest threats to cave ecosystems is intoxication from the accidental release of hazardous materials en route (Williams, 1991). Such spills have extirpated Ozark Cavefish populations and forced the closure of trout farm businesses (Arkansas State Highway and Transportation Department, 1979) in the study areas. It is suggested that hazardous material cleanups not involve water, but dry-based technologies. When the fire department flushed the petroleum (spill) off Highway 68, for example, this action sent a rapid plug flow to Ozark Spring (Johnson's) Trout Farm and killed off the entire stock (Arkansas State Highway and Transportation Department, 1979). Furthermore, such cleanup methods simply dilute the hazardous waste, but offer no remediation. The use of chemicals such as deicers or herbicides for road maintenance should be minimized or replaced with alternatives such as gravel (for ice) and native short grasses which do not need to be mowed (for road shoulders).

The entire study area for the toll road to the NWA Airport is probable or confirmed habitat for the federally listed Ozark Cavefish (*Amblyopsis rosae*). Published sites of *A. rosae* include: Cave Springs Cave and Mule Hole Sink (Graening and Brown, 1999; ANHC, 2000); a cave on Brush Creek (Cloutman and Olmstead, 1976); Ozark Spring and Cave Spring (Arkansas State Highway and Transportation Department, 1979; US FWS, 1989); Hewlitt Spring Hole (ANHC, 2000). No road construction activities should occur within the areas that are geohydrologically linked to these sites.

Of special concern is aquatic habitat on Little Osage Creek, north of the H. 264 bridge at Healing Springs. This habitat contains one of only two remaining populations in Arkansas of the Arkansas Darter (*Etheostoma cragini*), which is a Candidate species for ESA listing (Hargrave, 1998; ANHC 2000). Healing Springs is also one of only 3 remaining habitats for the Least Darter (*Etheostoma microperca*), another Species of Concern which is in danger of extirpation from Arkansas.

Road alternatives 1, 2, and 3 are not recommended because they would impact federal and state listed species' habitat, including the recharge area for Cave Springs Cave, and Healing Springs. It is suggested that the US 412 by-pass be connected to the Intermodal Access Road to minimize the amount of land affected by these roads. Corridor E is the preferred route of the US 412 project, and corridor alternatives 4, 5, and 6 would connect well to the NWA Airport. Such a route would run downstream of the Healing Springs area of concern and run outside of the Cave Springs Cave recharge boundary.

#### Literature Cited

Aley, T., and C. Aley. 1979. Prevention of adverse impacts on endangered, threatened, and rare animal species in Benton and Washington Counties, Arkansas. Report prepared by the Ozark Underground Laboratory for the Northwest Arkansas Regional Planning Commission. 35 pp.

Arkansas Natural Heritage Commission. 2000. Natural Heritage Database.

Arkansas State Highway and Transportation Department, Environmental Division. 1979. Highway 71 relocation, Fayetteville – McKissic Creek, administrative action, final environmental impact statement. Federal Highway Administration, U. S. Department of Transportation. FHWA-ARK-EIS-75-02-F, FAP-ARK-011-3(34).

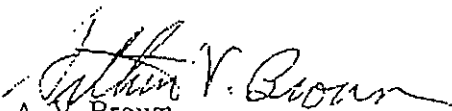
Cloutman, D., and L. Olmsted. 1976. The fishes of Washington County, Arkansas. Publication No. 39, Arkansas Water Resources Center, University of Arkansas, Fayetteville, AR. 109 pp.

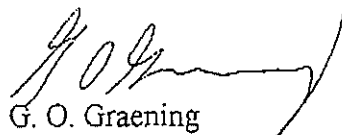
Graening, G. and A. Brown. 1999. Cavefish Population Status and Environmental Quality in Cave Springs Cave, Arkansas. A report submitted to the Arkansas Natural Heritage Commission. Publication No. 276, Arkansas Water Resources Center, University of Arkansas, Fayetteville, AR.

Hargrave, C. 1998. Status of Arkansas darter (*Etheostoma cragini*) and Least Darter (*Etheostoma microperca*) in Arkansas. Honors Thesis. Arkansas Cooperative Fish and Wildlife Research Unit Publication No. 30. 131 pp.

U. S. Fish and Wildlife Service. 1989. Ozark Cavefish Recovery Plan. U. S. Fish and Wildlife Service. Atlanta, GA. 42 pp.

Williams, R. 1991. Water quality and groundwater recharge for the Cave Springs complex and associated streams near Cave Springs, Arkansas. Masters thesis, University of Arkansas, Fayetteville, AR.

  
A. V. Brown  
Associate Professor

  
G. O. Graening  
Research Associate



## Statement of the Ecological Impact of New Road Construction Projects in Washington and Benton Counties

G. O. Graening

The impact upon groundwater resources of three new road construction projects, US 71 (Bella Vista to Pineville), Intermodal Access Road to Northwest Arkansas Regional Airport, and Springdale Northern Bypass (US 412), are assessed. Short-term impacts consist primarily of degradations in water quality, especially sedimentation and pollution from the drainage of construction-related chemicals (especially petroleum products) off the road rights-of-way. Long-term impacts consist of water quality and water quantity stressors, including the loss of cave, spring, and stream habitat, intoxication by accidental spill of hazardous substances or the drainage of chemicals (de-icers, petroleum residues, etc.) off the road rights-of-way; and the alteration of hydrologic flow regime, especially the loss of spring recharge from the increase in impervious surfaces (both roads and their associated commercial developments). Several important cave resources and endangered species' habitats will be impacted as well.

It is suggested that two documents prepared by Tom Aley of the Ozark Underground Laboratory for previous State of Arkansas road projects be consulted for these new road construction projects:

- *Prevention of adverse impacts on endangered, threatened, and rare animal species in Benton and Washington Counties, Arkansas.*
- *Highway 71 relocation, Fayetteville – McKissic Creek, administrative action, final environmental impact statement.*

The entire studies areas are underlain by karst topography, and this geologic setting typically harbors a plethora of cave resources and allows rapid transport of surface materials into the groundwater via karst windows. It is recommended that road construction activities cease immediately when a karst feature, such as a collapsed doline, fissure, spring, or losing stream, is encountered. At this point, civil engineers/geologists should evaluate the structural integrity of the area, and biologists/speleologists should evaluate the biological and speleological resources. Together, this group should decide the best plan of action, which may include the rerouting of the road, plugging, capping or filling the karst feature, or the rerouting of water flow. Responding properly to karst features will enhance protection of cave resources and will produce a superior, lower-maintenance road.

Sedimentation is a major threat to cave resources, and all efforts should be made to detain storm water runoff from the construction sites. Properly maintained silt fences (straw bale or hardware cloth) are a necessity in all drainage areas, and construction activities should cease during and immediately after spates. Waste fill dirt should not be deposited in losing streams, depressions (dolines), or valleys because these features are associated with karst processes.

One of the greatest threats to cave ecosystems is intoxication from the accidental release of hazardous materials en route (Williams, 1991). Such spills have extirpated Ozark Cavefish

populations and forced the closure of trout farm businesses (Arkansas State Highway and Transportation Department, 1979) in the study areas. It is suggested that hazardous material cleanups not involve water, but dry-based technologies. When the fire department flushed the petroleum (spill) off Highway 68, for example, this action sent a rapid plug flow to Ozark Spring (Johnson's) Trout Farm and killed off the entire stock (Arkansas State Highway and Transportation Department, 1979). Furthermore, such cleanup methods simply dilute the hazardous waste, but offer no remediation. The use of chemicals such as deicers or herbicides for road maintenance should be minimized or replaced with alternatives such as gravel (for ice) and native short grasses which do not need to be mowed (for road shoulders).

### **Intermodal Access Road to NWA Airport**

The entire study area for the toll road to the NWA Airport is probable or confirmed habitat for the federally listed Ozark Cavefish (*Amblyopsis rosae*). Published sites of *A. rosae* include: Cave Springs Cave and Mule Hole Sink (Graening and Brown, 1999; ANHC, 2000); a cave on Brush Creek (Cloutman and Olmstead, 1976); Ozark Spring and Cave Spring (Arkansas State Highway and Transportation Department, 1979; US FWS, 1989); Hewlitt Spring Hole (ANHC, 2000). No road construction activities should occur within the areas that are geohydrologically linked to these sites.

Of special concern is aquatic habitat on Little Osage Creek, north of the H. 264 bridge at Healing Springs. This habitat contains one of only two remaining populations in Arkansas of the Arkansas Darter (*Etheostoma cragini*), which is a Candidate species for ESA listing (Hargrave, 1998; ANHC 2000). Healing Springs is also one of only 3 remaining habitats for the Least Darter (*Etheostoma microperca*), another Species of Concern which is in danger of extirpation from Arkansas.

Without more specific route corridors from Barnard Dunkelberg & Company, it is difficult to assess specific impacts in the study area. Because this study area includes a large portion of the US 412 study corridors, it is suggested that the two road projects be combined to minimize the amount of land affected by these roads. Corridor E of the US 412 project runs very close to the NWA Airport, and a spur off this road is suggested to begin the Intermodal Access Road. Such a route would run downstream of the Healing Springs area of concern and run outside of the Cave Springs Cave recharge boundary.

### **Springdale Northern Bypass (US 412)**

The entire study area for the 412 bypass is probable or confirmed habitat for the federally listed Ozark Cavefish (*Amblyopsis rosae*). The northernmost corridor, Corridor D, intersects the recharge boundary of Cave Springs Cave and would undoubtedly affect the groundwater resources of this cave, and thus threatens its biota (which include the federally listed Ozark cavefish and gray bats). Corridor E appears to be acceptable, and would link easily to the NWA Airport access road. It is not clear why the existing US 412 could not be widened, and this alternative appears to have the least impact (except for the following area of concern).

An area of special concern for the US 412 project is the recharge area for Ozark Spring, Dot Spring, and Cave Spring. The recharge area boundaries for these springs have not been fully delineated. The segment of the existing US 412 (Sunset Boulevard old Highway 68) in Springdale between US 71B and US 71 is known to influence these important groundwater resources. This area is tributary to Ozark Spring (Johnson's Fish Farm), Dot Spring, and Cave Spring (historic Ozark Cavefish sites), which are downstream of this segment (Arkansas State Highway and Transportation Department, 1979). These three springs have been impacted severely from previous accidental hazardous material discharges. Aley (AHTD, 1979) reports a petroleum spill on Highway 68 that produced a fish-kill at Ozark Spring Trout Farm (which, soon after, was forced to close commercial operations permanently). This intoxication event and other pollution events (leachate from landfills, AHTD, 1979), extirpated the Ozark Cavefish from Ozark Spring and Cave Spring (which is adjacent to Ozark Spring).

### **US 71 (Bella Vista to Pineville)**

The Bella Vista area has many important cave resources. Crystal Cave is home to the federally listed gray bats (*Myotis grisescens*) (up to 20,400 endangered gray bats have been reported by Harvey, 1995). Bear Hollow Cave is home to one of only two published populations of the federally listed cave crayfish *Cambarus aculabrum*. A new population of this cave crayfish has been discovered in Old Pendergrass Cave near the Missouri border in the Bella Vista Village. As well, two Arkansas Species of Concern (ANHC, 2000), the Ozark Cave Amphipod (*Stygobromus ozarkensis*) and a cave isopod (*Caecidotea ancyla*) are found in Old Pendergrass Cave. The Near West Corridor would run very close to this cave, and would probably extirpate these listed species from this habitat.

Another area of concern is the watershed of Butler Creek, which would be impacted by the Far West Corridor. The Butler Creek drainage cave resources include Big Mouth Cave, Little Mouth Cave, Pregnant Nun Cave, Heckman Cave, and several un-named caves. Big Mouth, Little Mouth Caves contain a rare cave isopod (*Caecidotea*), which is an Arkansas Species of Concern (ANHC, 2000). Furthermore, Big Mouth Cave has exceptional cave resources, including important bat hibernation habitat, unique chert nodules, speleothems, over 1 mile of cave passage, and a significant stream flow.

### **Literature Cited**

Aley, T., and C. Aley. 1979. Prevention of adverse impacts on endangered, threatened, and rare animal species in Benton and Washington Counties, Arkansas. Report prepared by the Ozark Underground Laboratory for the Northwest Arkansas Regional Planning Commission. 35 pp.

Arkansas Natural Heritage Commission. 2000. Natural Heritage Database.

Arkansas State Highway and Transportation Department, Environmental Division. 1979. Highway 71 relocation, Fayetteville – McKissic Creek, administrative action, final

environmental impact statement. Federal Highway Administration, U. S. Department of Transportation. FHWA-ARK-EIS-75-02-F, FAP-ARK-011-3(34).

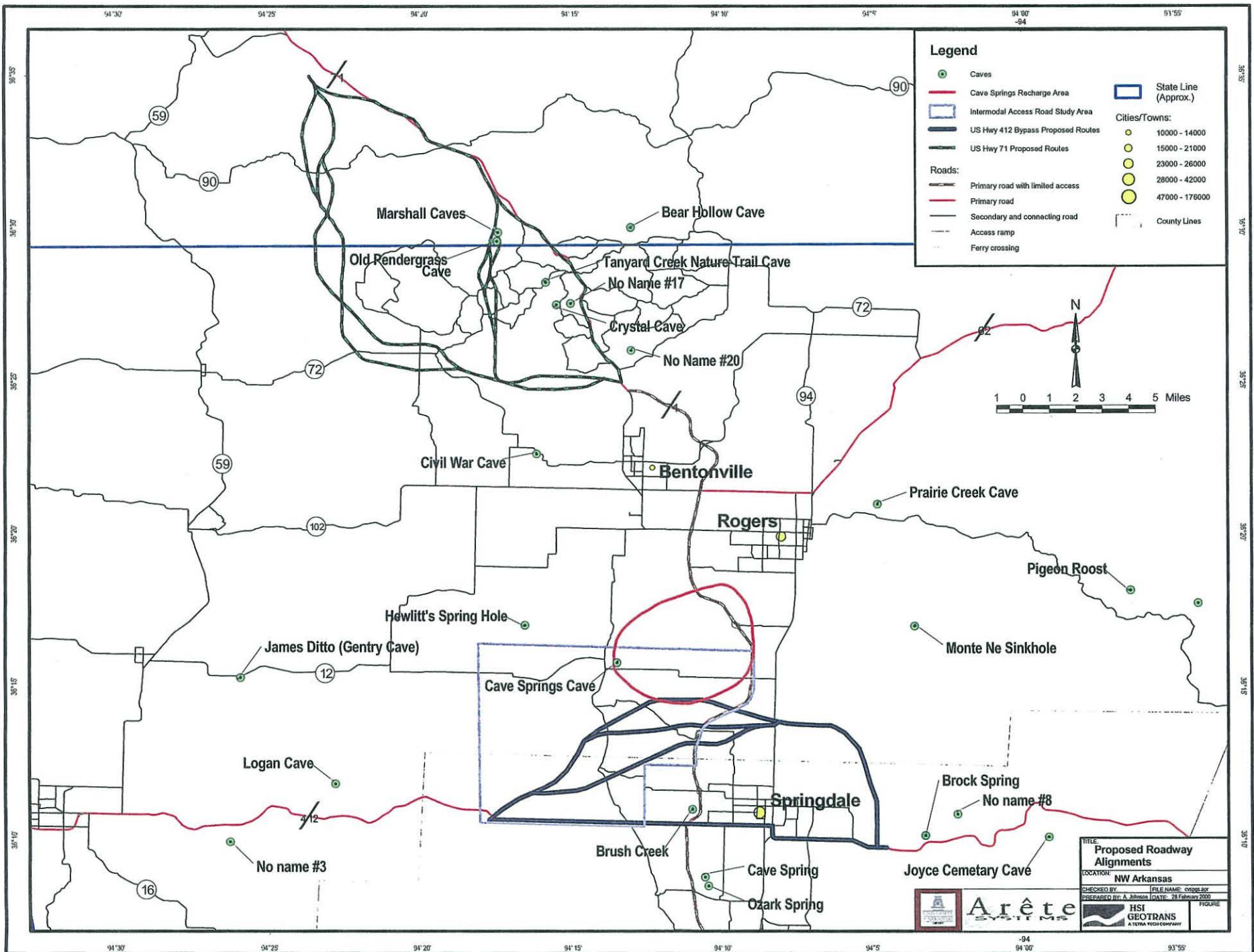
Cloutman, D., and L. Olmsted. 1976. The fishes of Washington County, Arkansas. Publication No. 39, Arkansas Water Resources Center, University of Arkansas, Fayetteville, AR. 109 pp.

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Hargrave, C. 1998. Status of Arkansas darter (*Etheostoma cragini*) and Least Darter (*Etheostoma microperca*) in Arkansas. Honors Thesis. Arkansas Cooperative Fish and Wildlife Research Unit Publication No. 30. 131 pp.

U. S. Fish and Wildlife Service. 1989. Ozark Cavefish Recovery Plan. U. S. Fish and Wildlife Service. Atlanta, GA. 42 pp.

Williams, R. 1991. Water quality and groundwater recharge for the Cave Springs complex and associated streams near Cave Springs, Arkansas. Masters thesis, University of Arkansas, Fayetteville, AR.



**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request <b>7/27/06</b>		4. Sheet 1 of _____	
1. Name of Project <b>NWARA Intermodal Access Road EIS</b>		5. Federal Agency Involved <b>FHWA NRCS</b>			
2. Type of Project <b>New Highway</b>		6. County and State <b>Benton, Arkansas</b>			
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS <b>8/3/06</b>		2. Person Completing Form <b>Laurent</b>	
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				4. Acres Irrigated   Average Farm Size   <b>132</b>	
5. Major Crop(s) <b>Fescue, Bermuda, Beef Cattle</b>	6. Farmable Land in Government Jurisdiction Acres: <b>361,400</b> % <b>37</b>		7. Amount of Farmland As Defined in FPPA Acres: <b>200,210</b> % <b>37</b>		
8. Name Of Land Evaluation System Used <b>LE-SCS</b>	9. Name of Local Site Assessment System _____		10. Date Land Evaluation Returned by NRCS <b>8/31/06</b>		
<b>PART III (To be completed by Federal Agency)</b>		<b>Alternative Corridor For Segment</b>			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		<b>124</b>	<b>131</b>		
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres In Corridor		<b>124</b>	<b>131</b>	<b>0</b>	<b>0</b>
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>					
A. Total Acres Prime And Unique Farmland		<b>22</b>	<b>26</b>		
B. Total Acres Statewide And Local Important Farmland		<b>19</b>	<b>11</b>		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<b>0.02</b>	<b>0.01</b>		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		<b>57</b>	<b>58</b>		
<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>		<b>58</b>	<b>46</b>		
<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>		Maximum Points			
1. Area in Nonurban Use	15	<b>15</b>	<b>15</b>		
2. Perimeter in Nonurban Use	10	<b>10</b>	<b>10</b>		
3. Percent Of Corridor Being Farmed	20	<b>5</b>	<b>5</b>		
4. Protection Provided By State And Local Government	20	<b>0</b>	<b>0</b>		
5. Size of Present Farm Unit Compared To Average	10	<b>5</b>	<b>5</b>		
6. Creation Of Nonfarmable Farmland	25	<b>3</b>	<b>3</b>		
7. Availability Of Farm Support Services	5	<b>5</b>	<b>5</b>		
8. On-Farm Investments	20	<b>18</b>	<b>18</b>		
9. Effects Of Conversion On Farm Support Services	25	<b>0</b>	<b>0</b>		
10. Compatibility With Existing Agricultural Use	10	<b>0</b>	<b>0</b>		
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>61</b>	<b>61</b>	<b>0</b>	<b>0</b>
<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)		<b>100</b>	<b>58</b>	<b>46</b>	
Total Corridor Assessment (From Part VI above or a local site assessment)		<b>160</b>	<b>61</b>	<b>61</b>	<b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>		<b>260</b>	<b>119</b>	<b>107</b>	<b>0</b>
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?  YES <input type="checkbox"/> NO <input type="checkbox"/>		
5. Reason For Selection:					

Signature of Person Completing this Part:

DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor



**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
Arkansas Division  
700 West Capitol Avenue, Room 3130  
Little Rock, AR 72201-3298**



October 23, 2001

IN REPLY REFER TO:  
AHTD Job 040266  
Springdale Northern Bypass  
Benton and Washington  
Counties  
HDA-AR

Mr. Chad Smith  
Principal Chief  
Cherokee Nation of Oklahoma  
P.O. Box 948  
Tahlequah, OK 74056

Dear Chief Smith:

This letter is written in response to the recently revised federal regulations regarding the treatment of cultural resources. According to 36 CFR Part 800.4(a) of the National Historic Preservation Act of 1966, as amended, all Federal agencies are required to consult with pertinent Indian Tribes if an action may affect ancestral lands or properties that may be of religious or cultural significance.

The Northwest Arkansas Regional Airport Authority, through the Arkansas State Highway and Transportation Department is preparing environmental documentation on a proposed project to construct approximately 8 miles of fully controlled access four-lane divided (interstate type) highway. The proposed highway will be on new location connecting the Northwest Arkansas Regional Airport to U.S. 512 north of Fayetteville (see enclosed location map).

At this point a records check of the Arkansas Archeological Survey's site files and the site files on record at the Arkansas Historic Preservation Program has been conducted and ten archeological sites have been identified in the project area. Two of these consist of historic farmsteads dating to the 19<sup>th</sup> and 20<sup>th</sup> centuries, while eight are prehistoric sites most of which probably date to the Archaic period.

The project also crosses the ten-mile wide corridor designated by the National Park Service as Trail of Tears National Historic Trail. Even though the exact route of the trail in the project area has not been verified, most researchers believe that it more than likely followed what is now known as Old Wire Road, which runs north-south along the eastern edge of our project area. The auto tour route that is currently in use lies to the west of Old Wire Road and runs along Highway 71B through the project area. Our project area will cross both Old Wire Road and Highway 71B. A windshield survey of the project area revealed that the Highway 71B is heavily developed. Old Wire road is currently a two lane paved road that has been upgraded

and improved considerably. It probably bears little resemblance to the route taken by the Cherokee in 1838-1839. None of the archeological sites or historic structures currently on record in the project vicinity can be specifically associated with the route. The trail is signed along Highway 71B but none of the signs are located within the proposed project area. There are also no interpretive sights or pullouts identifying the trail within the project area.

While none of the known archeological sites identified can be attributed to a particular tribe with certainty, we do know that most of northwest Arkansas was claimed as hunting territory by the Osage during the 18<sup>th</sup> and early 19<sup>th</sup> centuries. Even though the project area is not considered as traditional ancestral Cherokee homeland, we know that thousands of Cherokee were forced through the area on the Trail of Tears in 1838 and 1839. Thousands were known to have died along the route and many may have been buried near the trail.

At this point in the planning process, an intensive cultural resources survey is planned for all property within the proposed project right of way. We intend to pay particular attention to any sites or old roadbeds that could possibly be associated with the trail and will keep you posted as the project proceeds.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your tribe. If you have any questions or need additional information, please contact Mr. Randal Looney at (501) 324-6430. Should we not hear from you within a period of 30 days, we will proceed with project planning. We will continue to coordinate with you throughout the implementation of the project, and keep you informed of changes or developments as they occur.

Sincerely yours,

Sandra L. Otto  
Division Administrator

cc: Mr. Dan Flowers, AHTD, encls





IN REPLY REFER TO:

# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
110 S. Amity Road, Suite 300  
Conway, Arkansas 72032  
Tel.: 501/513-4470 Fax: 501/513-4480



November 16, 2011

Mr. Jerry B. Farrar, P.E.  
CH2M Hill  
401 S. Boston, Ste. 330  
Tulsa, Oklahoma 74103

Subject: Preliminary Draft Environmental Impact Statement (DEIS) for the Intermodal Access Roadway to the Northwest Arkansas Regional Airport (NWARA), Benton County, Arkansas

Dear Mr. Farrar:

This responds to your letter dated October 18, 2011, soliciting U.S. Fish and Wildlife Service (Service) comments on the above referenced document. Our comments are submitted in accordance with the Endangered Species Act of 1973 (87 stat. 884, as amended; 16 U.S.C. 1531 et seq.; Act).

This project is a proposal to construct a four-lane, fully controlled access highway designed to Interstate standards on a new location, connecting the Northwest Arkansas Regional Airport to the state and federal highway system including interstate 540. The proposed highway would be approximately eight miles (12.9 kilometers) in length through Benton County, Arkansas. Several alternatives were considered, including the No Action Alternative along with toll and non-toll options. A portion of the proposed project would share a common alignment with the proposed Springdale Northern Bypass.

The DEIS is generally well organized and well written. Service comments are offered concerning potential fish and wildlife adverse effects that require further analysis or documentation. As stated in the document, both the federally threatened Ozark cavefish (*Amblyopsis rosae*), and federally endangered gray bat (*Myotis grisescens*) occur in Cave Springs Cave which is adjacent to the project area with a proposed crossing of Osage Creek and Little Osage Creek located 3.3 miles from the cave entrance. Cave Springs Cave contains the largest known population of Ozark cavefish, over 2000 gray bats, and the recharge zone for this karst system is experiencing considerable urban development that threatens water quality, quantity and biota of the cave.

Gray bats are known to forage up to five miles from occupied caves along forested edge habitat and stream corridors. These bats are also an important source of nutrients within Cave Springs Cave that sustain Ozark cavefish populations, which feed on guano and other cave animals that depend on guano for nutrients. Gray bats could be affected by the proposed project as a result of riparian habitat disturbance, bridge designs, vehicular traffic/noise, and changes in water quality that affect forage species with aquatic lifestages. Bat surveys using acoustic monitoring and mist netting techniques should be performed by a Service approved biologist between the dates of March 15 to October 15 to determine use of the proposed project area by endangered gray bats. If gray bats are present, cutting restrictions for riparian habitats would be restricted to dates between October 16 and March 14 and appropriate bridge design would need to allow unrestricted passage of bats through the use

corridor(s). Further informal consultation under Section 7 of the Act is recommended as the project develops in order to determine the potential need for formal consultation. Additionally, secondary and cumulative impacts associated with the proposed project may affect both gray bats and the Ozark cavefish.

The DEIS assessment of potential secondary and cumulative impacts appears inadequate to address wildlife resource concerns, and specifically adverse effects to the Ozark Cavefish and gray bat. The no action alternative, which assumes no major improvements to Highway 264 from Interstate 540 to Cave Springs, does not appear to accurately reflect projected development plans for that roadway. Recently, the cities of Lowell and Rogers have expressed interest in upgrading Highway 264 for the purpose of improving transportation in this area due to planned economic development. The DEIS also states that installation of a new runway at the NWARA contained in the Master Plan Update for the airport was not “reasonably foreseeable” due to the 20 to 30 year projected timeframe. Given the rapid pace of development noted in the DEIS for the project area and the Master Plan Update containing the planned upgrade, the Service concludes the new runway is reasonably likely to occur in the foreseeable future. The airport lies within the recharge zone for Hewlitt’s Spring, a historic Ozark cavefish site that supplies spring water to Little Osage Creek. The cumulative effect of these actions in conjunction with the proposed project and increased urban development likely to occur as a result of improved transportation facilities should be further analyzed to determine potential effects to threatened and endangered species. If feasible, the Federal Highway Administration, Arkansas Highway and Transportation Department and city administrators for Lowell, Rogers and Cave Springs could work together to address transportation needs that meet purpose and need for the project while protecting and conserving karst resources in the Cave Springs Cave recharge zone.

The extent of the subterranean environment is difficult to clearly delineate within the proposed project area. Undiscovered karst features such as cave openings, sink holes, springs and losing streams may occur on or adjacent to the project, even in previously developed areas and could support threatened or endangered species. Therefore, the Service recommends the following precautionary measures be taken to avoid adverse effects to federally listed and sensitive species that may inhabit karst features which have not been previously surveyed:

1. Survey new right-of-ways for karst features such as cave openings, springs, losing streams and sinkholes.
2. Clearly mark and provide GPS coordinates (decimal degrees) for any caves or sinkholes found during the survey. The Service should be contacted for further evaluation to determine if the karst feature is used by federally listed or sensitive cave species.
3. If a cave is used by federally listed or sensitive species, the Service may require the cave to be mapped when bats are not present to determine if any additional openings or passages may be affected by the project. In addition, we may recommend slight modifications of the proposed project to allow additional buffer areas to be established. Incorporation of additional buffer areas may be necessary to avoid impacts to federally listed species.
4. In the event that holes or other openings are encountered during construction activities, the Service requests that work efforts cease in the immediate vicinity of the opening. The opening should be adequately marked and protected from work activities. Construction efforts should be directed around the opening and the Service should be contacted immediately. No fill

materials should be placed into the opening until Service or Service approved personnel have the opportunity to investigate the site thoroughly.

Project plans should also include context sensitive designs that minimize impacts to wildlife and their habitats from road construction. Examples would include maintaining hydrologic functions of streams or other waterbodies through proper bridge and culvert sizing and placement. Streams should be crossed at perpendicular angles whenever possible and the use of bottomless culverts or placement of traditional culverts slightly below grade to prevent outlet drop scouring is recommended. Slightly over-lengthened bridges or benches constructed above the ordinary high water mark beneath bridges can provide valuable wildlife passage and improve motorist safety. The Service also recommends working with surrounding communities to ensure that an emergency response plan for hazardous material spills is available to avoid unnecessary contamination of surface and groundwater.

Additionally, numerous species of migratory birds protected under the Migratory Bird Treaty Act are located in the area and may be nesting on structures or natural habitats affected by the proposed project. Surveys should be conducted prior to initiation of project construction and special consideration given to the times and dates of construction to avoid impacts to these species which typically nest in Arkansas from March through September.

Thank you for allowing our agency the opportunity to comment on the proposed project. For future correspondence on this matter, please contact Mitch Wine of this office at (501) 513-4488.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Melvin Tobin', with a stylized flourish at the end.

Melvin Tobin  
Deputy Project Leader

cc:

Christine Willis, United States Fish and Wildlife Service  
Randal Looney, Federal Highway Administration  
Lynn Malbrough, Arkansas Highway and Transportation Department  
Brenda Price, Arkansas Highway and Transportation Department  
John Fleming, Arkansas Highway and Transportation Department  
Cindy Osborne, Arkansas Natural Heritage Commission  
Robert Leonard, Arkansas Game and Fish Commission  
Raul Gutierrez, United States Environmental Protection Agency  
Mike Jansky, United States Environmental Protection Agency  
Kelly Maddoux, Barnard Dunkelberg and Company



CH2M HILL  
401 S. Boston  
Ste 330  
Tulsa, OK 74103  
Tel 918.583.3057  
Fax 918.584.5826

October 18, 2011

Mitch Wine  
Fish & Wildlife Biologist  
United States Fish and Wildlife Service  
Ecological Services  
110 South Amity Road, Suite 300  
Conway, AR 72032

Ref: Northwest Arkansas Regional Airport  
Intermodal Access Roadway Preliminary Draft EIS

Dear Mitch:

As was discussed with you and Marge Harney by phone on Thursday, October 13<sup>th</sup>, enclosed is the Preliminary Draft EIS document of the Intermodal Access Roadway to the Northwest Arkansas Regional Airport for your review. As we discussed on our phone call last week, the Arkansas Highway and Transportation Department and Federal Highway Administration have completed their review of this preliminary draft. They requested that we submit this to you for review prior to them signing off for scheduling the public hearing.

Also, as discussed on our call, that portion of the Intermodal Access Roadway from a point West of SH-112, where the access roadway turns Northwesterly, East to its intersection with I-540, is the same alignment and roadway type as the Springdale Northern Bypass that was included in the Final EIS, which you previously reviewed, and ROD for that facility. As you know, this is a controlled access highway as will be the portion from the Springdale Northern Bypass Northwesterly to its intersection with SH-240 at the airport.

Should you have questions during your review, or if we can do anything to expedite your review, please contact Kelly Maddoux with Barnard Dunkelberg at 918-585-8844, or [kelly@bd-c.com](mailto:kelly@bd-c.com), as he is normally more readily available than Ryk or me.

Best regards,

A handwritten signature in black ink, appearing to read "Jerry B. Farrar", written in a cursive style.

Jerry B. Farrar, P.E.  
Project Manager  
V.P., Director of Aviation

cc: Brenda Price, Arkansas Highway & Transportation Department  
Scott VanLaningham, Northwest Arkansas Regional Airport  
Kelly Maddoux, Barnard Dunkelberg and Company  
Ryk Dunkelberg, Barnard Dunkelberg and Company



CH2M HILL  
401 S. Boston Ave.  
Suite 330  
Tulsa, OK 74103  
Tel. 918-583-3057

February 10, 2012

Mr. Mitch Wine  
Fish and Wildlife Service  
UNITED STATES DEPARTMENT OF THE INTERIOR  
110 S. Amity Road, Suite 300  
Conway, Arkansas 72032

**RE: Northwest Arkansas Regional Airport Access, AHTD # 090069, FAP HPP-0238(1) Preliminary DEIS Comments**

Dear Mr. Wine:

Thank you for the letter of November 16, 2011 concerning the above referenced project signed by Mr. Melvin Tobin. We discussed the letter with Scott VanLaningham, CEO of the Northwest Arkansas Regional Airport and its Board of Directors and offer the following responses to this letter. In addition we propose to host a conference call with you, Brenda Price, Arkansas Highway and Transportation Department, Scott VanLaningham, representatives of Barnard Dunkelberg & Co and myself regarding our responses before including in the DEIS and holding the Public Hearing.

The Service's comments concerning the timing and need for the long-term projected new parallel runway as being "reasonably foreseeable" are being addressed in a separate letter from the Northwest Arkansas Regional Airport Authority. This letter will respond to your other concerns.

We understand the significance of bat surveys addressing the Gray bat and will include the recommendation to conduct surveys using acoustical monitoring and mist netting techniques by a Service approved biologist between the dates of March 15 to October 15 as a mitigation measure in the Final EIS. If Gray bats are present, cutting restrictions for riparian habitats would be restricted to dates between October 16 and March 14. Appropriate bridge design would need to allow unrestricted passage of bats through the use of corridors. These measures would be elements of the mitigation requirements and could be included in the Record of Decision.

Similarly, the concerns the Service has regarding sink holes, cave openings, and other water features, along with incorporation of sensitive design that minimize impact to wildlife and their habitat can also be included as mitigation measures and contained in the Record of Decision. The same can be said for the Service's concerns regarding community participation in the development of hazardous material spills.

We recognize that numerous species of migratory birds protected under the Migratory Bird Treaty Act are located in the area and may be nesting on structures or natural habitats affected by the proposed project. We agree that surveys can be conducted prior to initiation of project construction and special consideration given to the times and dates of construction to avoid impacts to these species. Again, this can be stated as mitigation in the FEIS and incorporated into the Record of Decision.

The Service's concerns regarding cumulative impacts to sensitive resources associated with the proposed widening of Highway 264 will be addressed in the FEIS Cumulative Impacts section as follows;

***There are discussions between communities between the Airport and I-540 to consider the widening of portions of State Highway 264. Referring to a letter dated November 22, 2011 from the Mayor of***

**Lowell to Ms. Lori Tudor of the Arkansas State Highway and Transportation Department, the plan is to widen State Highway 264 between Goad Springs Road and Bellview Road. The widening will consist of improving the highway from two lanes to three in this location.**

**The widening would occur in an area that is within the recharge area of Cave Springs Cave, which is home to endangered species. Although neither the Springdale Northern Bypass (SNB) alignment nor the Northwest Arkansas Regional Airport Intermodal Access Road will traverse the recharge area, and are downstream of the area, the cumulative effect of these projects, if implemented, may impact the critical resource. The Springdale Northern Bypass has been environmentally cleared with a Record of Decision issued in February 15, 2006 and the Northwest Arkansas Regional Airport Intermodal Access Road is planned to interchange with the SNB in the vicinity of Highway 112 and then continue East along the same exact alignment of the SNB (that was included in the SFEIS and ROD for the SNB) to its interchange with I-540. The Intermodal Access Road specifically rejected an alternative that required the widening of State Highway 264 due to the impact it would have on the critical resources associated with the Cave Springs Cave recharge area and it also did not meet the Purpose and Need of the Airport. The Airport Intermodal Access Road and the SNB are planned to be fully controlled access expressways.**

In keeping with the long standing policy of the Northwest Arkansas Regional Airport Authority addressing environmental protection, the Authority would oppose any improvements to State Highway 264 that would negatively impact the endangered species in the area. The Authority has no land use control jurisdiction that would enable them to limit ancillary induced growth that could occur along the highway as a result of highway improvements which could negatively impact the concerned species. In addition, the proposed Airport Access Road, and its connection to the Springdale Northern Bypass would accommodate and serve a greater population than improving State Highway 264, without endangering the sensitive underground species. Given that State and Federal Agencies, including the USF&W, have jurisdictional authority over developments that would cause negative impacts to threatened and endangered species, improvements within the recharge area are not expected to receive support from such agencies.

Again, thank you for your agencies comments to the PDEIS on the proposed project and for your consideration regarding our responses to the Services concerns. Please do not hesitate to call with questions or concerns.

Sincerely,



Jerry Farrar, PE  
Project Manager

Cc: Brenda Price/AHTD  
Scott VanLaningham/NWARA  
Ryk Dunkelberg/Barnard Dunkelberg





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John Elrod

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Kelly L. Johnson, A.A.E.

Asst. Airport Director

Mark H. Mellinger, A.A.E.

Director of Finance

Terry L. Franklin

Executive Director and CEO

Scott Van Laningham

February 28, 2012

Mr. Mitch Wine  
Fish and Wildlife Services  
United States Department of the Interior  
110 S. Amity Road, Suite 300  
Conway, Arkansas 72032

Re: Northwest Arkansas Regional Airport Access Road, AHTD #090069 HPP-0238 Preliminary DEIS Comments

Dear Mr. Wine:

I am writing in response to the letter November 16, 2011, concerning the above referenced project. Jerry Farrar of CH2M Hill has responded previously in regards to other concerns, and I am responding specifically to the concerns about the timing and need for new parallel runway and that the Service concludes that the new runway "is reasonably likely to occur in the foreseeable future."

The Northwest Arkansas Regional Airport Master Plan Update, completed in 2002, calculated the ability of the existing airport facilities to accommodate anticipated aircraft demand, expressed as the airfield capacity. Airfield capacity is primarily a function of the major aircraft operating surfaces (i.e., runways and taxiways) and their configuration, environmental conditions, specific characteristics of aviation demand, and air traffic control requirements. The evaluation method used to determine airfield capacity is described in FAA Advisory Circular 150/5060-5, *Airport Capacity and Delay*, and is defined as Annual Service Volume (ASV). With the runway configuration and in consideration of existing utilization patterns, the Airport capacity was calculated to have a future ASV for Northwest Arkansas Regional Airport was calculated at approximately 125,130 operations.

Forecasts for Northwest Arkansas Regional Airport were generated for the 2002 Master Plan Update. Total forecasted aircraft operations for the year 2020 were approximately 57,310. Using the most recent 12-month period (November 2010 through October 2011), there were 42,866 annual aircraft operations. A review of the most recent FAA forecasts, the *Terminal Area Forecasts, Fiscal Years 2010 to 2030* (TAF), which projects aircraft activity nationwide through the year 2030, indicates that the aircraft operations at

Page Two  
Mr. Wine Letter  
February 28, 2012

Northwest Arkansas Regional Airport are expected to increase to 61,016.

It is clear that the Airport will not exceed its operational capacity for at least 20 years, if not more. Even if the TAF are off by half, the calculated ASV would not be exceeded. Further, if the airport begins to experience constraints and delays due to aircraft operational demand, there are improvements to the existing airfield layout that could improve its capacity (e.g., constructing additional exit taxiways or constructing high-speed exit taxiways). Thus, the need for the second parallel runway is not expected to materialize in the reasonable and foreseeable future.

Sincerely,



Scott Van Laningham  
Executive Director and CEO

CC: Brenda Price, AHTD  
Ryk Dunkelberg, Barnard Dunkelberg and Company  
Jerry Farrar, CH2M Hill





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M. L. Van Poucke

**Executive Director/CEO**

Scott Van Laningham

**Airport Director**

Kelly L. Johnson, A.A.E.

**Director of Finance**

Terry L. Franklin

**Legal Counsel**

John R. Elrod

October 3, 2012

Mr. Mitch Wine  
Fish and Wildlife Services  
United States Department of the Interior  
110 S. Amity Road, Suite 300  
Conway, AR 72032

Re: Northwest Arkansas Regional Airport Access Road, AHTD #090069 HPP-0238, Runway Reconstruction Project

Dear Mr. Wine:

The Northwest Arkansas Regional Airport Authority is in the process of reconstructing the airport's runway. The runway is not being expanded, either in length or in width.

The runway at XNA has developed a condition known as alkali silica reactivity. In consultation with the Federal Aviation Administration, the airport began several years ago to take steps for the eventual replacement of the existing runway. As a single runway airport, the airport's first step was the construction of the outboard taxiway/alternate landing surface that could serve as the landing surface so the runway could be reconstructed. Construction of the alternate landing surface was completed earlier this year, and the airport moved all traffic to the alternate landing surface in June of this year.

The recently announced grants from the FAA provide the airport with sufficient funds to complete the reconstruction of the existing runway. Once that work is completed, all air traffic will be moved back to the existing runway. The airport wanted to clear up any possible confusion about this project being an expansion of the existing runway. We are replacing it, not expanding it.

If you have any questions, I can be reached at 479-205-1428.

Sincerely,

Scott Van Laningham

CC: Brenda Price, AHTD  
Ryk Dunkelberg, Barnard Dunkelberg and Company  
Jerry Farrar, CH2M Hill